

Laboratory Report Number: L12020435

Mark Lyon
Environmental Waste Solutions
2440 Louisiana Blvd
Albuquerque, NM 87110

Please find enclosed the analytical results for the samples you submitted to Microbac Laboratories. Review and compilation of your report was completed by Microbac's Ohio Valley Division (OVD). If you have any questions, comments, or require further assistance regarding this report, please contact your service representative listed below.

Laboratory Contact:
Stephanie Mossburg – Team Chemist/Data Specialist
(740) 373-4071
Stephanie.Mossburg@microbac.com

I certify that all test results meet all of the requirements of the DoD QSM and other applicable contract terms and conditions. Any exceptions are attached to this cover page or addressed in the method narratives presented in the report. All results for soil samples are reported on a 'dry-weight' basis unless specified otherwise. Analytical results for water and wastes are reported on a 'as received' basis unless specified otherwise. A statement of uncertainty for each analysis is available upon request. This laboratory report shall not be reproduced, except in full, without the written approval of Microbac Laboratories, DoD ELAP certification number 2936.01. The reported results are related only to the samples analyzed as received.

This report was certified on March 05 2012



David Vandenberg – Managing Director

State of Origin: NM
Accrediting Authority: N/A ID:N/A
QAPP: DOD Ver 4.1



Record of Sample Receipt and Inspection

Comments/Discrepancies

This is the record of the shipment conditions and the inspection records for the samples received and reported as a sample delivery group (SDG). All of the samples were inspected and observed to conform to our receipt policies, except as noted below.

There were no discrepancies.

Discrepancy	Resolution
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Coolers

Cooler #	Temperature Gun	Temperature	COC #	Airbill #
0015020	H	2.0		1002239552110004575000874824307381
0016953	H	1.0		1015923852110004575000795761747306
0016996	H	3.0		1015923852110004575000795761747291

Inspection Checklist

#	Question	Result
1	Were shipping coolers sealed?	Yes
2	Were custody seals intact?	Yes
3	Were cooler temperatures in range of 0-6?	Yes
4	Was ice present?	Yes
5	Were COC's received/information complete/signed and dated?	Yes
6	Were sample containers intact and match COC?	Yes
7	Were sample labels intact and match COC?	Yes
8	Were the correct containers and volumes received?	Yes
9	Were samples received within EPA hold times?	Yes
10	Were correct preservatives used? (water only)	Yes
11	Were pH ranges acceptable? (voa's excluded)	Yes
12	Were VOA samples free of headspace (less than 6mm)?	NA

Samples Received

Client ID	Laboratory ID	Date Collected	Date Received
HTA25-0212-1	L12020435-01	02/14/2012 10:15	02/15/2012 11:15
HTA25-0212-1	L12020435-02	02/14/2012 10:15	02/15/2012 11:15
HTA20-0212-1	L12020435-03	02/14/2012 11:40	02/15/2012 11:15
HTA20-0212-1	L12020435-04	02/14/2012 11:40	02/15/2012 11:15
HTA11-0212-1	L12020435-05	02/14/2012 13:00	02/15/2012 11:15
HTA11-0212-1	L12020435-06	02/14/2012 13:00	02/15/2012 11:15
HTA10A-0212-1	L12020435-07	02/14/2012 14:15	02/15/2012 11:15
HTA10A-0212-1	L12020435-08	02/14/2012 14:15	02/15/2012 11:15
HTA12-0212-1	L12020435-09	02/14/2012 16:10	02/15/2012 11:15
HTA12-0212-1	L12020435-10	02/14/2012 16:10	02/15/2012 11:15



Login Number: L12020435
Department: General Chromatography
Analyst: John W. Richards Jr.

METHOD

Analysis SW-846 6850

HOLDING TIMES

Sample Preparation: All holding times were met.

Sample Analysis: All holding times were met.

PREPARATION

Sample preparation proceeded normally.

CALIBRATION

Initial Calibration: For all compounds that yielded a %RSD greater than 15%, linear or higher order equations were applied. All acceptance criteria were met.

Alternate Source Standards: All acceptance criteria were met.

Continuing Calibration and Tune: All acceptance criteria were met.

BATCH QA/QC

Method Blank: All acceptance criteria were met.

Laboratory Control Sample: All acceptance criteria were met.

Matrix Spikes: The MS/MSD results were not associated with this sample delivery group.

SAMPLES

Samples: Samples 01, 03, 05, 07 and 09 were analyzed at a dilution to be within calibration range.

Internal Standards: All acceptance criteria were met.

Manual Integration Reason Codes

Reason #1: Data System Fails to Select Correct Peak In some cases the chromatography system selects and integrates the 'wrong peak'. In this case the analyst must correct the selection and force the system to integrate the proper peak. Other times the system may miss the peak completely.

Reason #2: Data System Splits the Peak Incorrectly or Integrates a False Peak as a Rider Peak This phenomena is common at low concentrations where the signal:noise ratio is low. A single compound (peak) is incorrectly split into multiple peaks or integrated as a main peak with one or more rider peaks resulting in low area counts for the target compound.

Reason #3: Improperly Integrated Isomers and/or coeluting compounds. This system often fails to distinguish coeluting compounds and or isomers. The integration areas and concentrations are wrong, and they must be corrected by manual integration. Prime examples are benzo(k)fluoranthene and benzo(b)fluoranthene which are often unresolved and integrated improperly when both are present at low concentrations in standards or samples.

Reason #4: System Establishes Incorrect Baseline There are numerous situations in chromatography where the system establishes the baseline incorrectly. Some baseline errors will be obvious to the analyst and should be corrected via manual procedures.

Reason #5: Miscellaneous Other situations involving integration errors may require in-depth review and technical judgment. These cases should be brought to the attention of the laboratory management. If the form of manual integration is not clearly covered by these four cases, then review and approval by the Laboratory Director or the QA/QC Supervisor

will be required.

I certify that this data package is in compliance with the terms and conditions agreed to by the client and Microbac Laboratories Inc., both technically and for completeness, except for the conditions noted above. Release of the data contained in this hard copy data package has been authorized by the Laboratory Manager or designated person, as verified by the following signature.

Narrative ID: 42833

Approved By: Mike Cochran





Login Number: L12020435
Department: Conventional
Analyst: Justin Hesson

METHOD

Analysis SW846 9040C,9045D/EPA 150.1/SM4500-H B (pH)

HOLDING TIMES

Sample Analysis: All holding times were met.

PREPARATION

Sample preparation proceeded normally.

BATCH QA/QC

Method Blank: All acceptance criteria were met.

Laboratory Control Sample: All acceptance criteria were met.

Matrix Spikes: All acceptance criteria were met.

Duplicates: All acceptance criteria were met.

SAMPLES

Samples: All acceptance criteria were met.

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Narrative ID: 42617

Approved By: Deanna Hesson

A handwritten signature in black ink, appearing to read "Deanna Hesson", is written over the printed name.



Login Number: L12020435
Department: General Chromatography
Analyst: Eric Lawson

METHOD

Analysis SW-846 8330

HOLDING TIMES

Sample Preparation: All holding times were met.

Sample Analysis: All holding times were met.

PREPARATION

Sample preparation proceeded normally.

CALIBRATION

Initial Calibration: For all compounds that yielded a %RSD greater than 15%, linear or higher order equations were applied. All acceptance criteria were met.

Alternate Source Standards: The percent difference was out of range for the following analytes: Tetryl. Please see the applicable QC report for a detailed presentation of the failures.

Continuing Calibration and Tune: Recoveries out of range were observed for the following analytes: Tetryl. Please see the applicable QC report for a detailed presentation of the failures.

BATCH QA/QC

Method Blank: All acceptance criteria were met.

Laboratory Control Sample: All acceptance criteria were met.

Matrix Spikes: The MS/MSD results were not associated with this sample delivery group.

SAMPLES

Samples: Samples 03, 05 and 07 were analyzed at a dilution to be within calibration range.

All positive hits were confirmed by second column analysis.

Surrogates: All acceptance criteria were met.

Manual Integration Reason Codes

Reason #1: Data System Fails to Select Correct Peak In some cases the chromatography system selects and integrates the 'wrong peak'. In this case the analyst must correct the selection and force the system to integrate the proper peak. Other times the system may miss the peak completely.

Reason #2: Data System Splits the Peak Incorrectly or Integrates a False Peak as a Rider Peak This phenomena is common at low concentrations where the signal:noise ratio is low. A single compound (peak) is incorrectly split into multiple peaks or integrated as a main peak with one or more rider peaks resulting in low area counts for the target compound.

Reason #3: Improperly Integrated Isomers and/or coeluting compounds. This system often fails to distinguish coeluting compounds and or isomers. The integration areas and concentrations are wrong, and they must be corrected by manual integration. Prime examples are benzo(k)fluoranthene and benzo(b)fluoranthene which are often unresolved and integrated improperly when both are present at low concentrations in standards or samples.

Reason #4: System Establishes Incorrect Baseline There are numerous situations in chromatography where the system establishes the baseline incorrectly. Some baseline errors will be obvious to the analyst and should be corrected

via manual procedures.

Reason #5: Miscellaneous Other situations involving integration errors may require in-depth review and technical judgment. These cases should be brought to the attention of the laboratory management. If the form of manual integration is not clearly covered by these four cases, then review and approval by the Laboratory Director or the QA/QC Supervisor will be required.

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Narrative ID: 42862

Approved By: Mike Cochran





Login Number: L12020435
Department: Metals
Analyst: Kim Rhodes

METHOD

Preparation: SW-846 3005

Analysis: SW-846 6010

HOLDING TIMES

Sample Preparation: All holding times were met.

Sample Analysis: All holding times were met.

PREPARATION

Sample preparation proceeded normally.

CALIBRATION

Initial Calibration: All acceptance criteria were met.

Alternate Source Standards: All acceptance criteria were met.

Interference Check Standards: All acceptance criteria were met.

Continuing Calibration Verification: All acceptance criteria were met.

Continuing Calibration Blank: All acceptance criteria were met.

BATCH QA/QC

Method Blank: WG389943 - The method blank associated with this analytical batch yielded a result for iron of 0.0818 mg/L which exceeded the limit of detection. All QA/QC and client samples were reanalyzed for iron on a later calibration.

Laboratory Control Sample: All acceptance criteria were met.

Serial Dilution/Post Digestion Spikes: WG389943 - All acceptance criteria were met.

Matrix Spikes: All acceptance criteria were met.

SAMPLES

Samples: All acceptance criteria were met.

Narrative ID: 42609

Approved By: Sheri Pfalzgraf

A handwritten signature in black ink, appearing to read "Sheri L. Pfalzgraf", is written over the printed name.



Login Number: L12020435
Department: Metals
Analyst: Erin Long

METHOD

Preparation: SW-846 3015

Analysis: SW-846 6020

HOLDING TIMES

Sample Preparation: All holding times were met.

Sample Analysis: All holding times were met.

PREPARATION

Sample preparation proceeded normally.

CALIBRATION

Initial Calibration: All acceptance criteria were met.

Alternate Source Standards: All acceptance criteria were met.

Interference Check Standards: All acceptance criteria were met.

Continuing Calibration: All acceptance criteria were met.

Continuing Calibration Blank: All acceptance criteria were met.

Low Level Check: All acceptance criteria were met.

BATCH QA/QC

Method Blank: All acceptance criteria were met.

Laboratory Control Sample: All acceptance criteria were met.

Serial Dilution/Post Digestion Spikes: WG389946 - All acceptance criteria were met.

Matrix Spikes: All acceptance criteria were met.

SAMPLES

Samples: All acceptance criteria were met.

Narrative ID: 42453

Approved By: Sheri Pfalzgraf

A handwritten signature in black ink, appearing to read "Sheri L. Pfalzgraf".



Login Number: L12020435
Department: Metals - AA
Analyst: Pierce Morris

METHOD

Preparation: SW-846 7470

Analysis: SW-846 7470

HOLDING TIMES

Sample Preparation: All holding times were met.

Sample Analysis: All holding times were met.

PREPARATION

Sample preparation proceeded normally.

CALIBRATION

Initial Calibration: All acceptance criteria were met.

Alternate Source Standards: All acceptance criteria were met.

Interference Check Standards: All acceptance criteria were met.

Continuing Calibration Verification: All acceptance criteria were met.

Continuing Calibration Blank: WG390074 - Due to continuing calibration blank failure for mercury on 20-FEB-2012 at 10:53, client samples 04, 06, 08, and 10 were reanalyzed for mercury.

BATCH QA/QC

Method Blank: All acceptance criteria were met.

Laboratory Control Sample: All acceptance criteria were met.

Serial Dilution/Post Digestion Spikes: WG390074 - All acceptance criteria were met.

Matrix Spikes: All acceptance criteria were met.

SAMPLES

Samples: All acceptance criteria were met.

Narrative ID: 42434

Approved By: Sheri Pfalzgraf

A handwritten signature in black ink, appearing to read "Sheri L. Pfalzgraf".



Login Number: L12020435
Department: General Chromatography
Analyst: Jeremy Kinney
Analyst #2: Hema Vilasagar

METHOD

Analysis SW-846 9056/300.0

HOLDING TIMES

Sample Preparation: All holding times were met.

Sample Analysis: All holding times were met.

PREPARATION

Sample preparation proceeded normally.

CALIBRATION

Initial Calibration: All acceptance criteria were met.

Alternate Source Standards: All acceptance criteria were met.

Continuing Calibration and Tune: All acceptance criteria were met.

BATCH QA/QC

Method Blank: All acceptance criteria were met.

Laboratory Control Sample: All acceptance criteria were met.

Matrix Spikes: All acceptance criteria were met.

SAMPLES

Samples: Samples L12020435 (01,03,05,07,09) were analyzed at dilutions only due to their high screen results for sulfate and chloride which were over the calibration range.

Manual Integration Reason Codes

Reason #1: Data System Fails to Select Correct Peak In some cases the chromatography system selects and integrates the 'wrong peak'. In this case the analyst must correct the selection and force the system to integrate the proper peak. Other times the system may miss the peak completely.

Reason #2: Data System Splits the Peak Incorrectly or Integrates a False Peak as a Rider Peak This phenomena is common at low concentrations where the signal:noise ratio is low. A single compound (peak) is incorrectly split into multiple peaks or integrated as a main peak with one or more rider peaks resulting in low area counts for the target compound.

Reason #3: Improperly Integrated Isomers and/or coeluting compounds. This system often fails to distinguish coeluting compounds and or isomers. The integration areas and concentrations are wrong, and they must be corrected by manual integration. Prime examples are benzo(k)fluoranthene and benzo(b)fluoranthene which are often unresolved and integrated improperly when both are present at low concentrations in standards or samples.

Reason #4: System Establishes Incorrect Baseline There are numerous situations in chromatography where the system establishes the baseline incorrectly. Some baseline errors will be obvious to the analyst and should be corrected via manual procedures.

Reason #5: Miscellaneous Other situations involving integration errors may require in-depth review and technical judgment. These cases should be brought to the attention of the laboratory management. If the form of manual integration is not clearly covered by these four cases, then review and approval by the Laboratory Director or the QA/QC Supervisor will be required.

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Narrative ID: 42655

Approved By: Mike Cochran





Login Number: L12020435
Department: Conventional
Analyst: Deanna Hesson

METHOD

Analysis EPA 310.2 (Alkalinity)

HOLDING TIMES

Sample Analysis: All holding times were met.

PREPARATION

Sample preparation proceeded normally.

BATCH QA/QC

Method Blank: The blank result was lower than the LOQ (reporting limit), but greater than the LOD (MDL).

Laboratory Control Sample: All acceptance criteria were met.

Matrix Spikes: All acceptance criteria were met.

Duplicates: All acceptance criteria were met.

SAMPLES

Samples: All acceptance criteria were met.

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Narrative ID: 42382

Approved By: Deanna Hesson

A handwritten signature in black ink, appearing to read "Deanna Hesson", is written below the "Approved By" text.



Login Number: L12020435
Department: Conventional
Analyst: Deanna Hesson

METHOD

Analysis EPA 353.2/SM4500-NO3 F (Nitrate)

HOLDING TIMES

Sample Analysis: Nitrate is reported as the difference of nitrate-nitrite (28 day hold) and nitrite (48 hour hold). Both analysis were analyzed within the appropriate hold time. The nitrate hold time is within compliance.

PREPARATION

Sample preparation proceeded normally.

BATCH QA/QC

Method Blank: All acceptance criteria were met.

Laboratory Control Sample: All acceptance criteria were met.

Matrix Spikes: All acceptance criteria were met.

Duplicates: All acceptance criteria were met.

SAMPLES

Samples: All acceptance criteria were met.

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Narrative ID: 42618

Approved By: Deanna Hesson

A handwritten signature in black ink, appearing to read "Deanna Hesson", is written over the printed name.

Certificate of Analysis

Sample #: L12020435-01	PrePrep Method: N/A	Instrument: LCMS1
Client ID: HTA25-0212-1	Prep Method: 6850	Prep Date: 02/23/2012 13:15
Matrix: Water	Analytical Method: 6850	Cal Date: 01/24/2012 17:25
Workgroup #: WG390462	Analyst: JWR	Run Date: 02/24/2012 18:13
Collect Date: 02/14/2012 10:15	Dilution: 10000	File ID: 1LM.LM15423
Sample Tag: DL01	Units: ug/L	

Analyte	CAS #	Result	Qual	LOQ	LOD
Perchlorate	14797-73-0	14400		2000	1000

Sample #: L12020435-01	PrePrep Method: N/A	Instrument: HPLC4
Client ID: HTA25-0212-1	Prep Method: 3535	Prep Date: 02/21/2012 09:30
Matrix: Water	Analytical Method: 8330B	Cal Date: 02/15/2012 19:12
Workgroup #: WG390324	Analyst: ECL	Run Date: 02/23/2012 13:20
Collect Date: 02/14/2012 10:15	Dilution: 1	File ID: 4L023271.F
Sample Tag: CF01	Units: ug/L	

Analyte	CAS #	Result	Qual	LOQ	LOD
RDX	121-82-4	2.37		1.05	0.263

Surrogate	Recovery	Lower Limit	Upper Limit	Q
1,2-Dinitrobenzene	99.8	50	150	

Sample #: L12020435-01	PrePrep Method: N/A	Instrument: HPLC5
Client ID: HTA25-0212-1	Prep Method: 3535	Prep Date: 02/21/2012 09:30
Matrix: Water	Analytical Method: 8330B	Cal Date: 02/10/2011 16:32
Workgroup #: WG390324	Analyst: ECL	Run Date: 02/22/2012 12:47
Collect Date: 02/14/2012 10:15	Dilution: 1	File ID: 5L006543.F
Sample Tag: 01	Units: ug/L	

Analyte	CAS #	Result	Qual	LOQ	LOD
1,3,5-Trinitrobenzene	99-35-4		U	1.05	0.263
1,3-Dinitrobenzene	99-65-0		U	1.05	0.263
2,4,6-Trinitrotoluene	118-96-7		U	1.05	0.263
2,4-Dinitrotoluene	121-14-2		U	1.05	0.263
2,6-Dinitrotoluene	606-20-2		U	1.05	0.263
2-Amino-4,6-dinitrotoluene	35572-78-2		U	1.05	0.263
2-Nitrotoluene	88-72-2		U	1.05	0.263
3-Nitrotoluene	99-08-1		U	1.05	0.263
4-Nitrotoluene	99-99-0		U	1.05	0.263
4-Amino-2,6-dinitrotoluene	19406-51-0		U	1.05	0.263
HMX	2691-41-0		U	1.05	0.263
Nitrobenzene	98-95-3		U	1.05	0.263

Certificate of Analysis

Analyte	CAS #	Result	Qual	LOQ	LOD
RDX	121-82-4	1.46		1.05	0.263
Tetryl	479-45-8		U	1.05	0.263
Surrogate	Recovery	Lower Limit	Upper Limit	Q	
1,2-Dinitrobenzene	106	50	150		
U	Analyte was not detected. The concentration is below the reported LOD.				

Sample #: L12020435-01		PrePrep Method: N/A		Instrument: ICP-THERMO2		
Client ID: HTA25-0212-1		Prep Method: 3005A		Prep Date: 02/17/2012 07:33		
Matrix: Water		Analytical Method: 6010B		Cal Date: 02/26/2012 08:25		
Workgroup #: WG389943		Analyst: KHR		Run Date: 02/26/2012 11:59		
Collect Date: 02/14/2012 10:15		Dilution: 1		File ID: T2.022612.115906		
Sample Tag: 02		Units: mg/L				
Analyte		CAS #	Result	Qual	LOQ	LOD
Iron, Total		7439-89-6		U	0.100	0.0500
U	Analyte was not detected. The concentration is below the reported LOD.					

Sample #: L12020435-01		PrePrep Method: N/A		Instrument: ICP-THERMO2		
Client ID: HTA25-0212-1		Prep Method: 3005A		Prep Date: 02/17/2012 07:33		
Matrix: Water		Analytical Method: 6010B		Cal Date: 02/22/2012 09:14		
Workgroup #: WG389943		Analyst: KHR		Run Date: 02/22/2012 10:15		
Collect Date: 02/14/2012 10:15		Dilution: 1		File ID: T2.022212.101534		
Sample Tag: 01		Units: mg/L				
Analyte		CAS #	Result	Qual	LOQ	LOD
Manganese, Total		7439-96-5	0.0920		0.0100	0.00500

Sample #: L12020435-01		PrePrep Method: N/A		Instrument: IC2		
Client ID: HTA25-0212-1		Prep Method: 300.0		Prep Date: 02/17/2012 16:30		
Matrix: Water		Analytical Method: 300.0		Cal Date: 12/21/2011 13:49		
Workgroup #: WG390018		Analyst: JBK		Run Date: 02/17/2012 20:58		
Collect Date: 02/14/2012 10:15		Dilution: 3		File ID: I20217122058.18		
Sample Tag: DL01		Units: mg/L				
Analyte		CAS #	Result	Qual	LOQ	LOD
Chloride		16887-00-6	43.8		0.600	0.300
Sulfate		14808-79-8	191		3.00	1.50

Certificate of Analysis

Sample #: L12020435-01	PrePrep Method: N/A	Instrument: ORION-4STAR
Client ID: HTA25-0212-1	Prep Method: 9040C	Prep Date: N/A
Matrix: Water	Analytical Method: 9040C	Cal Date:
Workgroup #: WG389699	Analyst: JDH	Run Date: 02/15/2012 14:50
Collect Date: 02/14/2012 10:15	Dilution: 1	File ID: OS12021615412301
Sample Tag:	Units: UNITS	

Analyte	CAS #	Result	Qual	LOQ	LOD
Corrosivity pH	10-29-7	7.07		0.000	0.000

Sample #: L12020435-01	PrePrep Method: N/A	Instrument: SMARTCHEM
Client ID: HTA25-0212-1	Prep Method: 310.2	Prep Date: N/A
Matrix: Water	Analytical Method: 310.2	Cal Date: 02/16/2012 11:11
Workgroup #: WG389762	Analyst: DIH	Run Date: 02/16/2012 11:29
Collect Date: 02/14/2012 10:15	Dilution: 1	File ID: SC120216004.038
Sample Tag: 01	Units: mg/L	

Analyte	CAS #	Result	Qual	LOQ	LOD
Alkalinity, Bicarbonate (as CaCO3)		251		20.0	10.0

Sample #: L12020435-01	PrePrep Method: N/A	Instrument: SMARTCHEM
Client ID: HTA25-0212-1	Prep Method: 310.2	Prep Date: N/A
Matrix: Water	Analytical Method: 310.2	Cal Date: 02/16/2012 11:11
Workgroup #: WG389762	Analyst: DIH	Run Date: 02/16/2012 11:29
Collect Date: 02/14/2012 10:15	Dilution: 1	File ID: SC120216004.038
Sample Tag: 01	Units: mg/L	

Analyte	CAS #	Result	Qual	LOQ	LOD
Alkalinity, Total (as CaCO3)		251		20.0	10.0

Sample #: L12020435-01	PrePrep Method: N/A	Instrument: SMARTCHEM
Client ID: HTA25-0212-1	Prep Method: 310.2	Prep Date: N/A
Matrix: Water	Analytical Method: 310.2	Cal Date: 02/16/2012 11:11
Workgroup #: WG389762	Analyst: DIH	Run Date: 02/16/2012 11:29
Collect Date: 02/14/2012 10:15	Dilution: 1	File ID: SC120216004.038
Sample Tag: 01	Units: mg/L	

Analyte	CAS #	Result	Qual	LOQ	LOD
Alkalinity, Carbonate (as CaCO3)			U	20.0	10.0

U	Analyte was not detected. The concentration is below the reported LOD.				
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Certificate of Analysis

Sample #: L12020435-01	PrePrep Method: N/A	Instrument: SMARTCHEM
Client ID: HTA25-0212-1	Prep Method: 353.2	Prep Date: N/A
Matrix: Water	Analytical Method: 353.2	Cal Date: 02/21/2012 10:43
Workgroup #: WG390221	Analyst: DIH	Run Date: 02/21/2012 13:25
Collect Date: 02/14/2012 10:15	Dilution: 4	File ID: SC12022209173501
Sample Tag:	Units: mg/L	

Analyte	CAS #	Result	Qual	LOQ	LOD
Nitrate-Nitrite (as N)		4.32		0.200	0.100

Sample #: L12020435-02	PrePrep Method: N/A	Instrument: ICP-THERMO2
Client ID: HTA25-0212-1	Prep Method: 3005A	Prep Date: 02/17/2012 07:33
Matrix: Water	Analytical Method: 6010B	Cal Date: 02/22/2012 09:14
Workgroup #: WG389943	Analyst: KHR	Run Date: 02/22/2012 10:25
Collect Date: 02/14/2012 10:15	Dilution: 1	File ID: T2.022212.102550
Sample Tag: 01	Units: mg/L	

Analyte	CAS #	Result	Qual	LOQ	LOD
Aluminum, Dissolved	7429-90-5		U	0.100	0.0500
Beryllium, Dissolved	7440-41-7		U	0.00200	0.00100
Calcium, Dissolved	7440-70-2	112		0.200	0.100
Magnesium, Dissolved	7439-95-4	27.8		0.500	0.250
Manganese, Dissolved	7439-96-5	0.0925		0.0100	0.00500
Potassium, Dissolved	7440-09-7	2.03		1.00	0.500
Sodium, Dissolved	7440-23-5	70.8		0.500	0.250
Tin, Dissolved	7440-31-5		U	0.500	0.250
Vanadium, Dissolved	7440-62-2		U	0.0100	0.00500
Zinc, Dissolved	7440-66-6	0.0559		0.0200	0.0100
U	Analyte was not detected. The concentration is below the reported LOD.				

Sample #: L12020435-02	PrePrep Method: N/A	Instrument: ICP-THERMO2
Client ID: HTA25-0212-1	Prep Method: 3005A	Prep Date: 02/17/2012 07:33
Matrix: Water	Analytical Method: 6010B	Cal Date: 02/26/2012 08:25
Workgroup #: WG389943	Analyst: KHR	Run Date: 02/26/2012 12:08
Collect Date: 02/14/2012 10:15	Dilution: 1	File ID: T2.022612.120851
Sample Tag: 02	Units: mg/L	

Analyte	CAS #	Result	Qual	LOQ	LOD
Iron, Dissolved	7439-89-6		U	0.100	0.0500
U	Analyte was not detected. The concentration is below the reported LOD.				

Certificate of Analysis

Sample #: L12020435-02		PrePrep Method: N/A		Instrument: ELAN-ICP		
Client ID: HTA25-0212-1		Prep Method: 3015		Prep Date: 02/17/2012 06:25		
Matrix: Water		Analytical Method: 6020		Cal Date: 02/20/2012 10:19		
Workgroup #: WG389946		Analyst: EDL		Run Date: 02/20/2012 12:03		
Collect Date: 02/14/2012 10:15		Dilution: 1		File ID: EL.022012.120305		
Sample Tag: 01		Units: mg/L				
Analyte		CAS #	Result	Qual	LOQ	LOD
Antimony, Dissolved		7440-36-0		U	0.00100	0.000500
Arsenic, Dissolved		7440-38-2	0.000505	J	0.00100	0.000500
Barium, Dissolved		7440-39-3	0.0310		0.00300	0.00150
Cadmium, Dissolved		7440-43-9		U	0.000600	0.000300
Chromium, Dissolved		7440-47-3	0.00114	J	0.00200	0.00100
Cobalt, Dissolved		7440-48-4	0.00207		0.00100	0.000500
Copper, Dissolved		7440-50-8		U	0.00200	0.00100
Lead, Dissolved		7439-92-1	0.000712	J	0.00100	0.000500
Nickel, Dissolved		7440-02-0	0.00367	J	0.00400	0.00200
Selenium, Dissolved		7782-49-2	0.00312		0.00100	0.000500
Silver, Dissolved		7440-22-4		U	0.00100	0.000500
Thallium, Dissolved		7440-28-0		U	0.000200	0.000100
J	Estimated value ; the analyte concentration was less than the LOQ.					
U	Analyte was not detected. The concentration is below the reported LOD.					

Sample #: L12020435-02		PrePrep Method: N/A		Instrument: HYDRA		
Client ID: HTA25-0212-1		Prep Method: 7470A		Prep Date: 02/17/2012 08:39		
Matrix: Water		Analytical Method: 7470A		Cal Date: 02/20/2012 09:55		
Workgroup #: WG390074		Analyst: PDM		Run Date: 02/20/2012 10:24		
Collect Date: 02/14/2012 10:15		Dilution: 1		File ID: HY.022012.102443		
Sample Tag: 01		Units: mg/L				
Analyte		CAS #	Result	Qual	LOQ	LOD
Mercury, Dissolved		7439-97-6		U	0.000200	0.000100
U	Analyte was not detected. The concentration is below the reported LOD.					

Certificate of Analysis

Sample #: L12020435-03	PrePrep Method: N/A	Instrument: LCMS1
Client ID: HTA20-0212-1	Prep Method: 6850	Prep Date: 02/23/2012 13:15
Matrix: Water	Analytical Method: 6850	Cal Date: 01/24/2012 17:25
Workgroup #: WG390462	Analyst: JWR	Run Date: 02/24/2012 18:31
Collect Date: 02/14/2012 11:40	Dilution: 10000	File ID: 1LM.LM15424
Sample Tag: DL01	Units: ug/L	

Analyte	CAS #	Result	Qual	LOQ	LOD
Perchlorate	14797-73-0	14500		2000	1000

Sample #: L12020435-03	PrePrep Method: N/A	Instrument: HPLC4
Client ID: HTA20-0212-1	Prep Method: 3535	Prep Date: 02/21/2012 09:30
Matrix: Water	Analytical Method: 8330B	Cal Date: 02/15/2012 19:12
Workgroup #: WG390324	Analyst: ECL	Run Date: 02/23/2012 14:13
Collect Date: 02/14/2012 11:40	Dilution: 1	File ID: 4L023272.F
Sample Tag: CF01	Units: ug/L	

Analyte	CAS #	Result	Qual	LOQ	LOD
HMX	2691-41-0	0.615	J	1.05	0.263

Surrogate	Recovery	Lower Limit	Upper Limit	Q
1,2-Dinitrobenzene	79.5	50	150	

J	Estimated value ; the analyte concentration was less than the LOQ.				
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Sample #: L12020435-03	PrePrep Method: N/A	Instrument: HPLC5
Client ID: HTA20-0212-1	Prep Method: 3535	Prep Date: 02/21/2012 09:30
Matrix: Water	Analytical Method: 8330B	Cal Date: 02/10/2011 16:32
Workgroup #: WG390324	Analyst: ECL	Run Date: 02/22/2012 13:26
Collect Date: 02/14/2012 11:40	Dilution: 1	File ID: 5L006544.F
Sample Tag: 01	Units: ug/L	

Analyte	CAS #	Result	Qual	LOQ	LOD
1,3,5-Trinitrobenzene	99-35-4		U	1.05	0.263
1,3-Dinitrobenzene	99-65-0		U	1.05	0.263
2,4,6-Trinitrotoluene	118-96-7		U	1.05	0.263
2,4-Dinitrotoluene	121-14-2		U	1.05	0.263
2,6-Dinitrotoluene	606-20-2		U	1.05	0.263
2-Amino-4,6-dinitrotoluene	35572-78-2		U	1.05	0.263
2-Nitrotoluene	88-72-2		U	1.05	0.263
3-Nitrotoluene	99-08-1		U	1.05	0.263
4-Nitrotoluene	99-99-0		U	1.05	0.263
4-Amino-2,6-dinitrotoluene	19406-51-0		U	1.05	0.263
HMX	2691-41-0	0.655	J	1.05	0.263

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Analyte		CAS #	Result	Qual	LOQ	LOD
Nitrobenzene		98-95-3		U	1.05	0.263
Tetryl		479-45-8		U	1.05	0.263
Surrogate		Recovery	Lower Limit	Upper Limit	Q	
1,2-Dinitrobenzene		85.3	50	150		
J	Estimated value ; the analyte concentration was less than the LOQ.					
U	Analyte was not detected. The concentration is below the reported LOD.					

Sample #: L12020435-03 **PrePrep Method:** N/A **Instrument:** HPLC4
Client ID: HTA20-0212-1 **Prep Method:** 3535 **Prep Date:** 02/21/2012 09:30
Matrix: Water **Analytical Method:** 8330B **Cal Date:** 02/15/2012 19:12
Workgroup #: WG390324 **Analyst:** ECL **Run Date:** 02/23/2012 17:46
Collect Date: 02/14/2012 11:40 **Dilution:** 10 **File ID:** 4L023276.F
Sample Tag: CFDL1 **Units:** ug/L

Analyte		CAS #	Result	Qual	LOQ	LOD
RDX		121-82-4	48.3		10.5	2.63
Surrogate		Recovery	Lower Limit	Upper Limit	Q	
1,2-Dinitrobenzene		91.6	50	150		

Sample #: L12020435-03 **PrePrep Method:** N/A **Instrument:** HPLC5
Client ID: HTA20-0212-1 **Prep Method:** 3535 **Prep Date:** 02/21/2012 09:30
Matrix: Water **Analytical Method:** 8330B **Cal Date:** 02/10/2011 16:32
Workgroup #: WG390324 **Analyst:** ECL **Run Date:** 02/22/2012 21:33
Collect Date: 02/14/2012 11:40 **Dilution:** 10 **File ID:** 5L006557.F
Sample Tag: DL01 **Units:** ug/L

Analyte		CAS #	Result	Qual	LOQ	LOD
RDX		121-82-4	47.8		10.5	2.63
Surrogate		Recovery	Lower Limit	Upper Limit	Q	
1,2-Dinitrobenzene		91.7	50	150		

Sample #: L12020435-03 **PrePrep Method:** N/A **Instrument:** ICP-THERMO2
Client ID: HTA20-0212-1 **Prep Method:** 3005A **Prep Date:** 02/17/2012 07:33
Matrix: Water **Analytical Method:** 6010B **Cal Date:** 02/26/2012 08:25
Workgroup #: WG389943 **Analyst:** KHR **Run Date:** 02/26/2012 12:12
Collect Date: 02/14/2012 11:40 **Dilution:** 1 **File ID:** T2.022612.121211
Sample Tag: 02 **Units:** mg/L

Analyte		CAS #	Result	Qual	LOQ	LOD
Iron, Total		7439-89-6		U	0.100	0.0500
U	Analyte was not detected. The concentration is below the reported LOD.					

Certificate of Analysis

Sample #: L12020435-03		PrePrep Method: N/A		Instrument: ICP-THERMO2		
Client ID: HTA20-0212-1		Prep Method: 3005A		Prep Date: 02/17/2012 07:33		
Matrix: Water		Analytical Method: 6010B		Cal Date: 02/22/2012 09:14		
Workgroup #: WG389943		Analyst: KHR		Run Date: 02/22/2012 10:29		
Collect Date: 02/14/2012 11:40		Dilution: 1		File ID: T2.022212.102908		
Sample Tag: 01		Units: mg/L				
Analyte		CAS #	Result	Qual	LOQ	LOD
Manganese, Total		7439-96-5		U	0.0100	0.00500
U	Analyte was not detected. The concentration is below the reported LOD.					

Sample #: L12020435-03		PrePrep Method: N/A		Instrument: IC2		
Client ID: HTA20-0212-1		Prep Method: 300.0		Prep Date: 02/17/2012 16:30		
Matrix: Water		Analytical Method: 300.0		Cal Date: 12/21/2011 13:49		
Workgroup #: WG390018		Analyst: JBK		Run Date: 02/17/2012 21:34		
Collect Date: 02/14/2012 11:40		Dilution: 3		File ID: I20217122134.20		
Sample Tag: DL01		Units: mg/L				
Analyte		CAS #	Result	Qual	LOQ	LOD
Chloride		16887-00-6	31.6		0.600	0.300
Sulfate		14808-79-8	168		3.00	1.50

Sample #: L12020435-03		PrePrep Method: N/A		Instrument: ORION-4STAR		
Client ID: HTA20-0212-1		Prep Method: 9040C		Prep Date: N/A		
Matrix: Water		Analytical Method: 9040C		Cal Date:		
Workgroup #: WG389699		Analyst: JDH		Run Date: 02/15/2012 14:50		
Collect Date: 02/14/2012 11:40		Dilution: 1		File ID: OS12021615412601		
Sample Tag:		Units: UNITS				
Analyte		CAS #	Result	Qual	LOQ	LOD
Corrosivity pH		10-29-7	7.10		0.000	0.000

Sample #: L12020435-03	PrePrep Method: N/A	Instrument: SMARTCHEM			
Client ID: HTA20-0212-1	Prep Method: 310.2	Prep Date: N/A			
Matrix: Water	Analytical Method: 310.2	Cal Date: 02/16/2012 11:11			
Workgroup #: WG389762	Analyst: DIH	Run Date: 02/16/2012 11:29			
Collect Date: 02/14/2012 11:40	Dilution: 1	File ID: SC120216004.039			
Sample Tag: 01	Units: mg/L				
Analyte	CAS #	Result	Qual	LOQ	LOD
Alkalinity, Total (as CaCO3)		243		20.0	10.0

Certificate of Analysis

Sample #: L12020435-03	PrePrep Method: N/A	Instrument: SMARTCHEM
Client ID: HTA20-0212-1	Prep Method: 310.2	Prep Date: N/A
Matrix: Water	Analytical Method: 310.2	Cal Date: 02/16/2012 11:11
Workgroup #: WG389762	Analyst: DIH	Run Date: 02/16/2012 11:29
Collect Date: 02/14/2012 11:40	Dilution: 1	File ID: SC120216004.039
Sample Tag: 01	Units: mg/L	

Analyte	CAS #	Result	Qual	LOQ	LOD
Alkalinity, Bicarbonate (as CaCO ₃)		243		20.0	10.0

Sample #: L12020435-03	PrePrep Method: N/A	Instrument: SMARTCHEM
Client ID: HTA20-0212-1	Prep Method: 310.2	Prep Date: N/A
Matrix: Water	Analytical Method: 310.2	Cal Date: 02/16/2012 11:11
Workgroup #: WG389762	Analyst: DIH	Run Date: 02/16/2012 11:29
Collect Date: 02/14/2012 11:40	Dilution: 1	File ID: SC120216004.039
Sample Tag: 01	Units: mg/L	

Analyte	CAS #	Result	Qual	LOQ	LOD
Alkalinity, Carbonate (as CaCO ₃)			U	20.0	10.0

U Analyte was not detected. The concentration is below the reported LOD.

Sample #: L12020435-03	PrePrep Method: N/A	Instrument: SMARTCHEM
Client ID: HTA20-0212-1	Prep Method: 353.2	Prep Date: N/A
Matrix: Water	Analytical Method: 353.2	Cal Date: 02/21/2012 10:43
Workgroup #: WG390221	Analyst: DIH	Run Date: 02/21/2012 13:25
Collect Date: 02/14/2012 11:40	Dilution: 8	File ID: SC12022209174401
Sample Tag:	Units: mg/L	

Analyte	CAS #	Result	Qual	LOQ	LOD
Nitrate-Nitrite (as N)		9.09		0.400	0.200

Sample #: L12020435-04	PrePrep Method: N/A	Instrument: ICP-THERMO2
Client ID: HTA20-0212-1	Prep Method: 3005A	Prep Date: 02/17/2012 07:33
Matrix: Water	Analytical Method: 6010B	Cal Date: 02/22/2012 09:14
Workgroup #: WG389943	Analyst: KHR	Run Date: 02/22/2012 10:45
Collect Date: 02/14/2012 11:40	Dilution: 1	File ID: T2.022212.104551
Sample Tag: 01	Units: mg/L	

Analyte	CAS #	Result	Qual	LOQ	LOD
Aluminum, Dissolved	7429-90-5		U	0.100	0.0500
Beryllium, Dissolved	7440-41-7		U	0.00200	0.00100

Certificate of Analysis

Analyte	CAS #	Result	Qual	LOQ	LOD
Calcium, Dissolved	7440-70-2	108		0.200	0.100
Magnesium, Dissolved	7439-95-4	27.4		0.500	0.250
Manganese, Dissolved	7439-96-5		U	0.0100	0.00500
Potassium, Dissolved	7440-09-7	1.03		1.00	0.500
Sodium, Dissolved	7440-23-5	65.1		0.500	0.250
Tin, Dissolved	7440-31-5		U	0.500	0.250
Vanadium, Dissolved	7440-62-2		U	0.0100	0.00500
Zinc, Dissolved	7440-66-6		U	0.0200	0.0100
U	Analyte was not detected. The concentration is below the reported LOD.				

Sample #: L12020435-04	PrePrep Method: N/A	Instrument: ICP-THERMO2
Client ID: HTA20-0212-1	Prep Method: 3005A	Prep Date: 02/17/2012 07:33
Matrix: Water	Analytical Method: 6010B	Cal Date: 02/26/2012 08:25
Workgroup #: WG389943	Analyst: KHR	Run Date: 02/26/2012 12:15
Collect Date: 02/14/2012 11:40	Dilution: 1	File ID: T2.022612.121535
Sample Tag: 02	Units: mg/L	

Analyte	CAS #	Result	Qual	LOQ	LOD
Iron, Dissolved	7439-89-6		U	0.100	0.0500
U	Analyte was not detected. The concentration is below the reported LOD.				

Sample #: L12020435-04	PrePrep Method: N/A	Instrument: ELAN-ICP
Client ID: HTA20-0212-1	Prep Method: 3015	Prep Date: 02/17/2012 06:25
Matrix: Water	Analytical Method: 6020	Cal Date: 02/20/2012 10:19
Workgroup #: WG389946	Analyst: EDL	Run Date: 02/20/2012 12:10
Collect Date: 02/14/2012 11:40	Dilution: 1	File ID: EL.022012.121052
Sample Tag: 01	Units: mg/L	

Analyte	CAS #	Result	Qual	LOQ	LOD
Antimony, Dissolved	7440-36-0		U	0.00100	0.000500
Arsenic, Dissolved	7440-38-2		U	0.00100	0.000500
Barium, Dissolved	7440-39-3	0.0285		0.00300	0.00150
Cadmium, Dissolved	7440-43-9		U	0.000600	0.000300
Chromium, Dissolved	7440-47-3		U	0.00200	0.00100
Cobalt, Dissolved	7440-48-4	0.00228		0.00100	0.000500
Copper, Dissolved	7440-50-8		U	0.00200	0.00100
Lead, Dissolved	7439-92-1		U	0.00100	0.000500
Nickel, Dissolved	7440-02-0	0.00319	J	0.00400	0.00200
Selenium, Dissolved	7782-49-2	0.00281		0.00100	0.000500
Silver, Dissolved	7440-22-4		U	0.00100	0.000500

Certificate of Analysis

Analyte	CAS #	Result	Qual	LOQ	LOD
Thallium, Dissolved	7440-28-0		U	0.000200	0.000100
J	Estimated value ; the analyte concentration was less than the LOQ.				
U	Analyte was not detected. The concentration is below the reported LOD.				

Sample #: L12020435-04 **PrePrep Method:** N/A **Instrument:** HYDRA
Client ID: HTA20-0212-1 **Prep Method:** 7470A **Prep Date:** 02/17/2012 08:39
Matrix: Water **Analytical Method:** 7470A **Cal Date:** 02/20/2012 09:55
Workgroup #: WG390074 **Analyst:** PDM **Run Date:** 02/20/2012 11:14
Collect Date: 02/14/2012 11:40 **Dilution:** 1 **File ID:** HY.022012.111447
Sample Tag: 01 **Units:** mg/L

Analyte	CAS #	Result	Qual	LOQ	LOD
Mercury, Dissolved	7439-97-6		U	0.000200	0.000100
U	Analyte was not detected. The concentration is below the reported LOD.				

Sample #: L12020435-05 **PrePrep Method:** N/A **Instrument:** LCMS1
Client ID: HTA11-0212-1 **Prep Method:** 6850 **Prep Date:** 02/23/2012 13:15
Matrix: Water **Analytical Method:** 6850 **Cal Date:** 01/24/2012 17:25
Workgroup #: WG390462 **Analyst:** JWR **Run Date:** 02/24/2012 18:50
Collect Date: 02/14/2012 13:00 **Dilution:** 2000 **File ID:** 1LM.LM15425
Sample Tag: DL01 **Units:** ug/L

Analyte	CAS #	Result	Qual	LOQ	LOD
Perchlorate	14797-73-0	3540		400	200

Sample #: L12020435-05 **PrePrep Method:** N/A **Instrument:** HPLC5
Client ID: HTA11-0212-1 **Prep Method:** 3535 **Prep Date:** 02/21/2012 09:30
Matrix: Water **Analytical Method:** 8330B **Cal Date:** 02/10/2011 16:32
Workgroup #: WG390324 **Analyst:** ECL **Run Date:** 02/22/2012 14:05
Collect Date: 02/14/2012 13:00 **Dilution:** 1 **File ID:** 5L006545.F
Sample Tag: 01 **Units:** ug/L

Analyte	CAS #	Result	Qual	LOQ	LOD
1,3,5-Trinitrobenzene	99-35-4		U	1.06	0.266
1,3-Dinitrobenzene	99-65-0		U	1.06	0.266
2,4,6-Trinitrotoluene	118-96-7		U	1.06	0.266
2,4-Dinitrotoluene	121-14-2		U	1.06	0.266
2,6-Dinitrotoluene	606-20-2		U	1.06	0.266
2-Amino-4,6-dinitrotoluene	35572-78-2		U	1.06	0.266
2-Nitrotoluene	88-72-2		U	1.06	0.266
3-Nitrotoluene	99-08-1		U	1.06	0.266

Certificate of Analysis

Analyte	CAS #	Result	Qual	LOQ	LOD
4-Nitrotoluene	99-99-0		U	1.06	0.266
4-Amino-2,6-dinitrotoluene	19406-51-0		U	1.06	0.266
HMX	2691-41-0	1.53		1.06	0.266
Nitrobenzene	98-95-3		U	1.06	0.266
Tetryl	479-45-8		U	1.06	0.266
Surrogate	Recovery	Lower Limit	Upper Limit	Q	
1,2-Dinitrobenzene	89.3	50	150		
U	Analyte was not detected. The concentration is below the reported LOD.				

Sample #: L12020435-05	PrePrep Method: N/A	Instrument: HPLC4
Client ID: HTA11-0212-1	Prep Method: 3535	Prep Date: 02/21/2012 09:30
Matrix: Water	Analytical Method: 8330B	Cal Date: 02/15/2012 19:12
Workgroup #: WG390324	Analyst: ECL	Run Date: 02/23/2012 15:06
Collect Date: 02/14/2012 13:00	Dilution: 1	File ID: 4L023273.F
Sample Tag: CF01	Units: ug/L	

Analyte		CAS #	Result	Qual	LOQ	LOD
HMX		2691-41-0	1.41		1.06	0.266
Surrogate		Recovery	Lower Limit	Upper Limit	Q	
1,2-Dinitrobenzene		88.3	50	150		

Sample #: L12020435-05		PrePrep Method: N/A		Instrument: HPLC4		
Client ID: HTA11-0212-1		Prep Method: 3535		Prep Date: 02/21/2012 09:30		
Matrix: Water		Analytical Method: 8330B		Cal Date: 02/15/2012 19:12		
Workgroup #: WG390324		Analyst: ECL		Run Date: 02/23/2012 18:39		
Collect Date: 02/14/2012 13:00		Dilution: 10		File ID: 4L023277.F		
Sample Tag: CFDL1		Units: ug/L				
Analyte		CAS #	Result	Qual	LOQ	LOD
RDX		121-82-4	58.6		10.6	2.66
Surrogate		Recovery	Lower Limit	Upper Limit	Q	
1,2-Dinitrobenzene		79.8	50	150		

Certificate of Analysis

Sample #: L12020435-05	PrePrep Method: N/A	Instrument: HPLC5
Client ID: HTA11-0212-1	Prep Method: 3535	Prep Date: 02/21/2012 09:30
Matrix: Water	Analytical Method: 8330B	Cal Date: 02/10/2011 16:32
Workgroup #: WG390324	Analyst: ECL	Run Date: 02/22/2012 22:12
Collect Date: 02/14/2012 13:00	Dilution: 10	File ID: 5L006558.F
Sample Tag: DL01	Units: ug/L	

Analyte	CAS #	Result	Qual	LOQ	LOD
RDX	121-82-4	56.9		10.6	2.66

Surrogate	Recovery	Lower Limit	Upper Limit	Q
1,2-Dinitrobenzene	96.7	50	150	

Sample #: L12020435-05	PrePrep Method: N/A	Instrument: ICP-THERMO2
Client ID: HTA11-0212-1	Prep Method: 3005A	Prep Date: 02/17/2012 07:33
Matrix: Water	Analytical Method: 6010B	Cal Date: 02/22/2012 09:14
Workgroup #: WG389943	Analyst: KHR	Run Date: 02/22/2012 10:49
Collect Date: 02/14/2012 13:00	Dilution: 1	File ID: T2.022212.104931
Sample Tag: 01	Units: mg/L	

Analyte	CAS #	Result	Qual	LOQ	LOD
Manganese, Total	7439-96-5	0.00995	J	0.0100	0.00500

J Estimated value ; the analyte concentration was less than the LOQ.

Sample #: L12020435-05	PrePrep Method: N/A	Instrument: ICP-THERMO2
Client ID: HTA11-0212-1	Prep Method: 3005A	Prep Date: 02/17/2012 07:33
Matrix: Water	Analytical Method: 6010B	Cal Date: 02/26/2012 08:25
Workgroup #: WG389943	Analyst: KHR	Run Date: 02/26/2012 12:32
Collect Date: 02/14/2012 13:00	Dilution: 1	File ID: T2.022612.123229
Sample Tag: 02	Units: mg/L	

Analyte	CAS #	Result	Qual	LOQ	LOD
Iron, Total	7439-89-6	0.119		0.100	0.0500

Sample #: L12020435-05	PrePrep Method: N/A	Instrument: IC2
Client ID: HTA11-0212-1	Prep Method: 300.0	Prep Date: 02/17/2012 16:30
Matrix: Water	Analytical Method: 300.0	Cal Date: 12/21/2011 13:49
Workgroup #: WG390018	Analyst: JBK	Run Date: 02/17/2012 22:11
Collect Date: 02/14/2012 13:00	Dilution: 3	File ID: I20217122211.22
Sample Tag: DL01	Units: mg/L	

Analyte	CAS #	Result	Qual	LOQ	LOD
Chloride	16887-00-6	31.6		0.600	0.300
Sulfate	14808-79-8	169		3.00	1.50

Certificate of Analysis

Sample #: L12020435-05	PrePrep Method: N/A	Instrument: ORION-4STAR
Client ID: HTA11-0212-1	Prep Method: 9040C	Prep Date: N/A
Matrix: Water	Analytical Method: 9040C	Cal Date:
Workgroup #: WG389699	Analyst: JDH	Run Date: 02/15/2012 14:50
Collect Date: 02/14/2012 13:00	Dilution: 1	File ID: OS12021615412901
Sample Tag:	Units: UNITS	

Analyte	CAS #	Result	Qual	LOQ	LOD
Corrosivity pH	10-29-7	7.23		0.000	0.000

Sample #: L12020435-05	PrePrep Method: N/A	Instrument: SMARTCHEM
Client ID: HTA11-0212-1	Prep Method: 310.2	Prep Date: N/A
Matrix: Water	Analytical Method: 310.2	Cal Date: 02/16/2012 11:59
Workgroup #: WG389764	Analyst: DIH	Run Date: 02/16/2012 12:01
Collect Date: 02/14/2012 13:00	Dilution: 1	File ID: SC120216005.013
Sample Tag: 01	Units: mg/L	

Analyte	CAS #	Result	Qual	LOQ	LOD
Alkalinity, Bicarbonate (as CaCO3)		224		20.0	10.0

Sample #: L12020435-05	PrePrep Method: N/A	Instrument: SMARTCHEM
Client ID: HTA11-0212-1	Prep Method: 310.2	Prep Date: N/A
Matrix: Water	Analytical Method: 310.2	Cal Date: 02/16/2012 11:59
Workgroup #: WG389764	Analyst: DIH	Run Date: 02/16/2012 12:01
Collect Date: 02/14/2012 13:00	Dilution: 1	File ID: SC120216005.013
Sample Tag: 01	Units: mg/L	

Analyte	CAS #	Result	Qual	LOQ	LOD
Alkalinity, Carbonate (as CaCO3)			U	20.0	10.0

U Analyte was not detected. The concentration is below the reported LOD.

Sample #: L12020435-05	PrePrep Method: N/A	Instrument: SMARTCHEM
Client ID: HTA11-0212-1	Prep Method: 310.2	Prep Date: N/A
Matrix: Water	Analytical Method: 310.2	Cal Date: 02/16/2012 11:59
Workgroup #: WG389764	Analyst: DIH	Run Date: 02/16/2012 12:01
Collect Date: 02/14/2012 13:00	Dilution: 1	File ID: SC120216005.013
Sample Tag: 01	Units: mg/L	

Analyte	CAS #	Result	Qual	LOQ	LOD
Alkalinity, Total (as CaCO3)		224		20.0	10.0

Certificate of Analysis

Sample #: L12020435-05	PrePrep Method: N/A	Instrument: SMARTCHEM
Client ID: HTA11-0212-1	Prep Method: 353.2	Prep Date: N/A
Matrix: Water	Analytical Method: 353.2	Cal Date: 02/21/2012 10:43
Workgroup #: WG390221	Analyst: DIH	Run Date: 02/21/2012 13:25
Collect Date: 02/14/2012 13:00	Dilution: 8	File ID: SC12022209175301
Sample Tag:	Units: mg/L	

Analyte	CAS #	Result	Qual	LOQ	LOD
Nitrate-Nitrite (as N)		7.44		0.400	0.200

Sample #: L12020435-06	PrePrep Method: N/A	Instrument: ICP-THERMO2
Client ID: HTA11-0212-1	Prep Method: 3005A	Prep Date: 02/17/2012 07:33
Matrix: Water	Analytical Method: 6010B	Cal Date: 02/26/2012 08:25
Workgroup #: WG389943	Analyst: KHR	Run Date: 02/26/2012 12:35
Collect Date: 02/14/2012 13:00	Dilution: 1	File ID: T2.022612.123550
Sample Tag: 02	Units: mg/L	

Analyte	CAS #	Result	Qual	LOQ	LOD
Iron, Dissolved	7439-89-6		U	0.100	0.0500
U	Analyte was not detected. The concentration is below the reported LOD.				

Sample #: L12020435-06	PrePrep Method: N/A	Instrument: ICP-THERMO2
Client ID: HTA11-0212-1	Prep Method: 3005A	Prep Date: 02/17/2012 07:33
Matrix: Water	Analytical Method: 6010B	Cal Date: 02/22/2012 09:14
Workgroup #: WG389943	Analyst: KHR	Run Date: 02/22/2012 10:52
Collect Date: 02/14/2012 13:00	Dilution: 1	File ID: T2.022212.105250
Sample Tag: 01	Units: mg/L	

Analyte	CAS #	Result	Qual	LOQ	LOD
Aluminum, Dissolved	7429-90-5		U	0.100	0.0500
Beryllium, Dissolved	7440-41-7		U	0.00200	0.00100
Calcium, Dissolved	7440-70-2	100		0.200	0.100
Magnesium, Dissolved	7439-95-4	27.5		0.500	0.250
Manganese, Dissolved	7439-96-5		U	0.0100	0.00500
Potassium, Dissolved	7440-09-7	1.12		1.00	0.500
Sodium, Dissolved	7440-23-5	61.3		0.500	0.250
Tin, Dissolved	7440-31-5		U	0.500	0.250
Vanadium, Dissolved	7440-62-2		U	0.0100	0.00500
Zinc, Dissolved	7440-66-6		U	0.0200	0.0100
U	Analyte was not detected. The concentration is below the reported LOD.				

Certificate of Analysis

Sample #: L12020435-06	PrePrep Method: N/A	Instrument: ELAN-ICP
Client ID: HTA11-0212-1	Prep Method: 3015	Prep Date: 02/17/2012 06:25
Matrix: Water	Analytical Method: 6020	Cal Date: 02/20/2012 10:19
Workgroup #: WG389946	Analyst: EDL	Run Date: 02/20/2012 12:18
Collect Date: 02/14/2012 13:00	Dilution: 1	File ID: EL.022012.121839
Sample Tag: 01	Units: mg/L	

Analyte	CAS #	Result	Qual	LOQ	LOD
Antimony, Dissolved	7440-36-0		U	0.00100	0.000500
Arsenic, Dissolved	7440-38-2		U	0.00100	0.000500
Barium, Dissolved	7440-39-3	0.0299		0.00300	0.00150
Cadmium, Dissolved	7440-43-9		U	0.000600	0.000300
Chromium, Dissolved	7440-47-3		U	0.00200	0.00100
Cobalt, Dissolved	7440-48-4		U	0.00100	0.000500
Copper, Dissolved	7440-50-8		U	0.00200	0.00100
Lead, Dissolved	7439-92-1		U	0.00100	0.000500
Nickel, Dissolved	7440-02-0	0.00265	J	0.00400	0.00200
Selenium, Dissolved	7782-49-2	0.00283		0.00100	0.000500
Silver, Dissolved	7440-22-4		U	0.00100	0.000500
Thallium, Dissolved	7440-28-0		U	0.000200	0.000100
J	Estimated value ; the analyte concentration was less than the LOQ.				
U	Analyte was not detected. The concentration is below the reported LOD.				

Sample #: L12020435-06	PrePrep Method: N/A	Instrument: HYDRA
Client ID: HTA11-0212-1	Prep Method: 7470A	Prep Date: 02/17/2012 08:39
Matrix: Water	Analytical Method: 7470A	Cal Date: 02/20/2012 09:55
Workgroup #: WG390074	Analyst: PDM	Run Date: 02/20/2012 11:16
Collect Date: 02/14/2012 13:00	Dilution: 1	File ID: HY.022012.111639
Sample Tag: 01	Units: mg/L	

Analyte	CAS #	Result	Qual	LOQ	LOD
Mercury, Dissolved	7439-97-6		U	0.000200	0.000100
U	Analyte was not detected. The concentration is below the reported LOD.				

Certificate of Analysis

Sample #: L12020435-07	PrePrep Method: N/A	Instrument: LCMS1
Client ID: HTA10A-0212-1	Prep Method: 6850	Prep Date: 02/23/2012 13:15
Matrix: Water	Analytical Method: 6850	Cal Date: 01/24/2012 17:25
Workgroup #: WG390462	Analyst: JWR	Run Date: 02/24/2012 19:09
Collect Date: 02/14/2012 14:15	Dilution: 2000	File ID: 1LM.LM15426
Sample Tag: DL01	Units: ug/L	

Analyte	CAS #	Result	Qual	LOQ	LOD
Perchlorate	14797-73-0	3360		400	200

Sample #: L12020435-07	PrePrep Method: N/A	Instrument: HPLC4
Client ID: HTA10A-0212-1	Prep Method: 3535	Prep Date: 02/21/2012 09:30
Matrix: Water	Analytical Method: 8330B	Cal Date: 02/15/2012 19:12
Workgroup #: WG390324	Analyst: ECL	Run Date: 02/23/2012 15:59
Collect Date: 02/14/2012 14:15	Dilution: 1	File ID: 4L023274.F
Sample Tag: CF01	Units: ug/L	

Analyte	CAS #	Result	Qual	LOQ	LOD
HMX	2691-41-0	1.15		1.08	0.269

Surrogate	Recovery	Lower Limit	Upper Limit	Q
1,2-Dinitrobenzene	100	50	150	

Sample #: L12020435-07	PrePrep Method: N/A	Instrument: HPLC5
Client ID: HTA10A-0212-1	Prep Method: 3535	Prep Date: 02/21/2012 09:30
Matrix: Water	Analytical Method: 8330B	Cal Date: 02/10/2011 16:32
Workgroup #: WG390324	Analyst: ECL	Run Date: 02/22/2012 14:44
Collect Date: 02/14/2012 14:15	Dilution: 1	File ID: 5L006546.F
Sample Tag: 01	Units: ug/L	

Analyte	CAS #	Result	Qual	LOQ	LOD
1,3,5-Trinitrobenzene	99-35-4		U	1.08	0.269
1,3-Dinitrobenzene	99-65-0		U	1.08	0.269
2,4,6-Trinitrotoluene	118-96-7		U	1.08	0.269
2,4-Dinitrotoluene	121-14-2		U	1.08	0.269
2,6-Dinitrotoluene	606-20-2		U	1.08	0.269
2-Amino-4,6-dinitrotoluene	35572-78-2		U	1.08	0.269
2-Nitrotoluene	88-72-2		U	1.08	0.269
3-Nitrotoluene	99-08-1		U	1.08	0.269
4-Nitrotoluene	99-99-0		U	1.08	0.269
4-Amino-2,6-dinitrotoluene	19406-51-0		U	1.08	0.269
HMX	2691-41-0	1.28		1.08	0.269
Nitrobenzene	98-95-3		U	1.08	0.269

Certificate of Analysis

Analyte	CAS #	Result	Qual	LOQ	LOD
Tetryl	479-45-8		U	1.08	0.269
Surrogate	Recovery	Lower Limit	Upper Limit	Q	
1,2-Dinitrobenzene	97.7	50	150		
U	Analyte was not detected. The concentration is below the reported LOD.				

Sample #: L12020435-07 **PrePrep Method:** N/A **Instrument:** HPLC5
Client ID: HTA10A-0212-1 **Prep Method:** 3535 **Prep Date:** 02/21/2012 09:30
Matrix: Water **Analytical Method:** 8330B **Cal Date:** 02/10/2011 16:32
Workgroup #: WG390324 **Analyst:** ECL **Run Date:** 02/22/2012 22:51
Collect Date: 02/14/2012 14:15 **Dilution:** 10 **File ID:** 5L006559.F
Sample Tag: DL01 **Units:** ug/L

Analyte	CAS #	Result	Qual	LOQ	LOD
RDX	121-82-4	82.8		10.8	2.69
Surrogate	Recovery	Lower Limit	Upper Limit	Q	
1,2-Dinitrobenzene	99.7	50	150		

Sample #: L12020435-07 **PrePrep Method:** N/A **Instrument:** HPLC4
Client ID: HTA10A-0212-1 **Prep Method:** 3535 **Prep Date:** 02/21/2012 09:30
Matrix: Water **Analytical Method:** 8330B **Cal Date:** 02/15/2012 19:12
Workgroup #: WG390324 **Analyst:** ECL **Run Date:** 02/23/2012 19:32
Collect Date: 02/14/2012 14:15 **Dilution:** 10 **File ID:** 4L023278.F
Sample Tag: CFDL1 **Units:** ug/L

Analyte	CAS #	Result	Qual	LOQ	LOD
RDX	121-82-4	84.8		10.8	2.69
Surrogate	Recovery	Lower Limit	Upper Limit	Q	
1,2-Dinitrobenzene	99.3	50	150		

Sample #: L12020435-07 **PrePrep Method:** N/A **Instrument:** ICP-THERMO2
Client ID: HTA10A-0212-1 **Prep Method:** 3005A **Prep Date:** 02/17/2012 07:33
Matrix: Water **Analytical Method:** 6010B **Cal Date:** 02/26/2012 08:25
Workgroup #: WG389943 **Analyst:** KHR **Run Date:** 02/26/2012 12:39
Collect Date: 02/14/2012 14:15 **Dilution:** 1 **File ID:** T2.022612.123911
Sample Tag: 02 **Units:** mg/L

Analyte	CAS #	Result	Qual	LOQ	LOD
Iron, Total	7439-89-6	0.117		0.100	0.0500

Certificate of Analysis

Sample #: L12020435-07	PrePrep Method: N/A	Instrument: ICP-THERMO2
Client ID: HTA10A-0212-1	Prep Method: 3005A	Prep Date: 02/17/2012 07:33
Matrix: Water	Analytical Method: 6010B	Cal Date: 02/22/2012 09:14
Workgroup #: WG389943	Analyst: KHR	Run Date: 02/22/2012 10:56
Collect Date: 02/14/2012 14:15	Dilution: 1	File ID: T2.022212.105610
Sample Tag: 01	Units: mg/L	

Analyte	CAS #	Result	Qual	LOQ	LOD
Manganese, Total	7439-96-5		U	0.0100	0.00500
U	Analyte was not detected. The concentration is below the reported LOD.				

Sample #: L12020435-07	PrePrep Method: N/A	Instrument: IC2
Client ID: HTA10A-0212-1	Prep Method: 300.0	Prep Date: 02/17/2012 16:30
Matrix: Water	Analytical Method: 300.0	Cal Date: 12/21/2011 13:49
Workgroup #: WG390018	Analyst: JBK	Run Date: 02/17/2012 22:48
Collect Date: 02/14/2012 14:15	Dilution: 3	File ID: I20217122248.24
Sample Tag: DL01	Units: mg/L	

Analyte	CAS #	Result	Qual	LOQ	LOD
Chloride	16887-00-6	31.7		0.600	0.300
Sulfate	14808-79-8	168		3.00	1.50

Sample #: L12020435-07	PrePrep Method: N/A	Instrument: ORION-4STAR
Client ID: HTA10A-0212-1	Prep Method: 9040C	Prep Date: N/A
Matrix: Water	Analytical Method: 9040C	Cal Date:
Workgroup #: WG389699	Analyst: JDH	Run Date: 02/15/2012 14:50
Collect Date: 02/14/2012 14:15	Dilution: 1	File ID: OS12021615413201
Sample Tag:	Units: UNITS	

Analyte	CAS #	Result	Qual	LOQ	LOD
Corrosivity pH	10-29-7	7.22		0.000	0.000

Sample #: L12020435-07	PrePrep Method: N/A	Instrument: SMARTCHEM
Client ID: HTA10A-0212-1	Prep Method: 310.2	Prep Date: N/A
Matrix: Water	Analytical Method: 310.2	Cal Date: 02/16/2012 11:59
Workgroup #: WG389764	Analyst: DIH	Run Date: 02/16/2012 12:02
Collect Date: 02/14/2012 14:15	Dilution: 1	File ID: SC120216005.014
Sample Tag: 01	Units: mg/L	

Analyte	CAS #	Result	Qual	LOQ	LOD
Alkalinity, Total (as CaCO3)		222		20.0	10.0

Certificate of Analysis

Sample #: L12020435-07	PrePrep Method: N/A	Instrument: SMARTCHEM
Client ID: HTA10A-0212-1	Prep Method: 310.2	Prep Date: N/A
Matrix: Water	Analytical Method: 310.2	Cal Date: 02/16/2012 11:59
Workgroup #: WG389764	Analyst: DIH	Run Date: 02/16/2012 12:02
Collect Date: 02/14/2012 14:15	Dilution: 1	File ID: SC120216005.014
Sample Tag: 01	Units: mg/L	

Analyte	CAS #	Result	Qual	LOQ	LOD
Alkalinity, Carbonate (as CaCO ₃)			U	20.0	10.0
U	Analyte was not detected. The concentration is below the reported LOD.				

Sample #: L12020435-07	PrePrep Method: N/A	Instrument: SMARTCHEM
Client ID: HTA10A-0212-1	Prep Method: 310.2	Prep Date: N/A
Matrix: Water	Analytical Method: 310.2	Cal Date: 02/16/2012 11:59
Workgroup #: WG389764	Analyst: DIH	Run Date: 02/16/2012 12:02
Collect Date: 02/14/2012 14:15	Dilution: 1	File ID: SC120216005.014
Sample Tag: 01	Units: mg/L	

Analyte	CAS #	Result	Qual	LOQ	LOD
Alkalinity, Bicarbonate (as CaCO ₃)		222		20.0	10.0

Sample #: L12020435-07	PrePrep Method: N/A	Instrument: SMARTCHEM
Client ID: HTA10A-0212-1	Prep Method: 353.2	Prep Date: N/A
Matrix: Water	Analytical Method: 353.2	Cal Date: 02/21/2012 10:43
Workgroup #: WG390221	Analyst: DIH	Run Date: 02/21/2012 13:25
Collect Date: 02/14/2012 14:15	Dilution: 8	File ID: SC12022209180201
Sample Tag:	Units: mg/L	

Analyte	CAS #	Result	Qual	LOQ	LOD
Nitrate-Nitrite (as N)		8.65		0.400	0.200

Sample #: L12020435-08	PrePrep Method: N/A	Instrument: ICP-THERMO2
Client ID: HTA10A-0212-1	Prep Method: 3005A	Prep Date: 02/17/2012 07:33
Matrix: Water	Analytical Method: 6010B	Cal Date: 02/22/2012 09:14
Workgroup #: WG389943	Analyst: KHR	Run Date: 02/22/2012 10:59
Collect Date: 02/14/2012 14:15	Dilution: 1	File ID: T2.022212.105930
Sample Tag: 01	Units: mg/L	

Analyte	CAS #	Result	Qual	LOQ	LOD
Aluminum, Dissolved	7429-90-5		U	0.100	0.0500
Beryllium, Dissolved	7440-41-7		U	0.00200	0.00100
Calcium, Dissolved	7440-70-2	96.6		0.200	0.100
Magnesium, Dissolved	7439-95-4	26.5		0.500	0.250

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Analyte	CAS #	Result	Qual	LOQ	LOD
Manganese, Dissolved	7439-96-5		U	0.0100	0.00500
Potassium, Dissolved	7440-09-7	1.36		1.00	0.500
Sodium, Dissolved	7440-23-5	61.0		0.500	0.250
Tin, Dissolved	7440-31-5		U	0.500	0.250
Vanadium, Dissolved	7440-62-2		U	0.0100	0.00500
Zinc, Dissolved	7440-66-6		U	0.0200	0.0100
U	Analyte was not detected. The concentration is below the reported LOD.				

Sample #: L12020435-08	PrePrep Method: N/A	Instrument: ICP-THERMO2
Client ID: HTA10A-0212-1	Prep Method: 3005A	Prep Date: 02/17/2012 07:33
Matrix: Water	Analytical Method: 6010B	Cal Date: 02/26/2012 08:25
Workgroup #: WG389943	Analyst: KHR	Run Date: 02/26/2012 12:42
Collect Date: 02/14/2012 14:15	Dilution: 1	File ID: T2.022612.124233
Sample Tag: 02	Units: mg/L	

Analyte	CAS #	Result	Qual	LOQ	LOD
Iron, Dissolved	7439-89-6		U	0.100	0.0500
U	Analyte was not detected. The concentration is below the reported LOD.				

Sample #: L12020435-08	PrePrep Method: N/A	Instrument: ELAN-ICP
Client ID: HTA10A-0212-1	Prep Method: 3015	Prep Date: 02/17/2012 06:25
Matrix: Water	Analytical Method: 6020	Cal Date: 02/20/2012 10:19
Workgroup #: WG389946	Analyst: EDL	Run Date: 02/20/2012 12:26
Collect Date: 02/14/2012 14:15	Dilution: 1	File ID: EL.022012.122627
Sample Tag: 01	Units: mg/L	

Analyte	CAS #	Result	Qual	LOQ	LOD
Antimony, Dissolved	7440-36-0		U	0.00100	0.000500
Arsenic, Dissolved	7440-38-2		U	0.00100	0.000500
Barium, Dissolved	7440-39-3	0.0289		0.00300	0.00150
Cadmium, Dissolved	7440-43-9		U	0.000600	0.000300
Chromium, Dissolved	7440-47-3		U	0.00200	0.00100
Cobalt, Dissolved	7440-48-4	0.000570	J	0.00100	0.000500
Copper, Dissolved	7440-50-8	0.00114	J	0.00200	0.00100
Lead, Dissolved	7439-92-1		U	0.00100	0.000500
Nickel, Dissolved	7440-02-0	0.00305	J	0.00400	0.00200
Selenium, Dissolved	7782-49-2	0.00346		0.00100	0.000500
Silver, Dissolved	7440-22-4		U	0.00100	0.000500
Thallium, Dissolved	7440-28-0		U	0.000200	0.000100
J	Estimated value ; the analyte concentration was less than the LOQ.				

Certificate of Analysis

U	Analyte was not detected. The concentration is below the reported LOD.
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Sample #: L12020435-08	PrePrep Method: N/A	Instrument: HYDRA
Client ID: HTA10A-0212-1	Prep Method: 7470A	Prep Date: 02/17/2012 08:39
Matrix: Water	Analytical Method: 7470A	Cal Date: 02/20/2012 09:55
Workgroup #: WG390074	Analyst: PDM	Run Date: 02/20/2012 11:18
Collect Date: 02/14/2012 14:15	Dilution: 1	File ID: HY.022012.111842
Sample Tag: 01	Units: mg/L	

Analyte	CAS #	Result	Qual	LOQ	LOD
Mercury, Dissolved	7439-97-6		U	0.000200	0.000100
U	Analyte was not detected. The concentration is below the reported LOD.				

Sample #: L12020435-09	PrePrep Method: N/A	Instrument: LCMS1
Client ID: HTA12-0212-1	Prep Method: 6850	Prep Date: 02/23/2012 13:15
Matrix: Water	Analytical Method: 6850	Cal Date: 01/24/2012 17:25
Workgroup #: WG390462	Analyst: JWR	Run Date: 02/24/2012 15:03
Collect Date: 02/14/2012 16:10	Dilution: 10	File ID: 1LM.LM15413
Sample Tag: DL01	Units: ug/L	

Analyte	CAS #	Result	Qual	LOQ	LOD
Perchlorate	14797-73-0	11.8		2.00	1.00

Sample #: L12020435-09	PrePrep Method: N/A	Instrument: HPLC5
Client ID: HTA12-0212-1	Prep Method: 3535	Prep Date: 02/21/2012 09:30
Matrix: Water	Analytical Method: 8330B	Cal Date: 02/10/2011 16:32
Workgroup #: WG390324	Analyst: ECL	Run Date: 02/22/2012 15:23
Collect Date: 02/14/2012 16:10	Dilution: 1	File ID: 5L006547.F
Sample Tag: 01	Units: ug/L	

Analyte	CAS #	Result	Qual	LOQ	LOD
1,3,5-Trinitrobenzene	99-35-4		U	1.05	0.263
1,3-Dinitrobenzene	99-65-0		U	1.05	0.263
2,4,6-Trinitrotoluene	118-96-7		U	1.05	0.263
2,4-Dinitrotoluene	121-14-2		U	1.05	0.263
2,6-Dinitrotoluene	606-20-2		U	1.05	0.263
2-Amino-4,6-dinitrotoluene	35572-78-2		U	1.05	0.263
2-Nitrotoluene	88-72-2		U	1.05	0.263
3-Nitrotoluene	99-08-1		U	1.05	0.263
4-Nitrotoluene	99-99-0		U	1.05	0.263
4-Amino-2,6-dinitrotoluene	19406-51-0		U	1.05	0.263
HMX	2691-41-0		U	1.05	0.263

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Analyte	CAS #	Result	Qual	LOQ	LOD
Nitrobenzene	98-95-3		U	1.05	0.263
RDX	121-82-4		U	1.05	0.263
Tetryl	479-45-8		U	1.05	0.263
Surrogate	Recovery	Lower Limit	Upper Limit	Q	
1,2-Dinitrobenzene	90.3	50	150		
U	Analyte was not detected. The concentration is below the reported LOD.				

Sample #: L12020435-09	PrePrep Method: N/A	Instrument: ICP-THERMO2
Client ID: HTA12-0212-1	Prep Method: 3005A	Prep Date: 02/17/2012 07:33
Matrix: Water	Analytical Method: 6010B	Cal Date: 02/26/2012 08:25
Workgroup #: WG389943	Analyst: KHR	Run Date: 02/26/2012 12:45
Collect Date: 02/14/2012 16:10	Dilution: 1	File ID: T2.022612.124555
Sample Tag: 02	Units: mg/L	

Analyte	CAS #	Result	Qual	LOQ	LOD
Iron, Total	7439-89-6	0.165		0.100	0.0500

Sample #: L12020435-09	PrePrep Method: N/A	Instrument: ICP-THERMO2
Client ID: HTA12-0212-1	Prep Method: 3005A	Prep Date: 02/17/2012 07:33
Matrix: Water	Analytical Method: 6010B	Cal Date: 02/22/2012 09:14
Workgroup #: WG389943	Analyst: KHR	Run Date: 02/22/2012 11:02
Collect Date: 02/14/2012 16:10	Dilution: 1	File ID: T2.022212.110250
Sample Tag: 01	Units: mg/L	

Analyte	CAS #	Result	Qual	LOQ	LOD
Manganese, Total	7439-96-5	0.00856	J	0.0100	0.00500

J Estimated value ; the analyte concentration was less than the LOQ.

Sample #: L12020435-09	PrePrep Method: N/A	Instrument: IC2
Client ID: HTA12-0212-1	Prep Method: 300.0	Prep Date: 02/17/2012 16:30
Matrix: Water	Analytical Method: 300.0	Cal Date: 12/21/2011 13:49
Workgroup #: WG390018	Analyst: JBK	Run Date: 02/17/2012 23:25
Collect Date: 02/14/2012 16:10	Dilution: 3	File ID: I20217122325.26
Sample Tag: DL01	Units: mg/L	

Analyte	CAS #	Result	Qual	LOQ	LOD
Chloride	16887-00-6	28.5		0.600	0.300
Sulfate	14808-79-8	208		3.00	1.50

Certificate of Analysis

Sample #: L12020435-09	PrePrep Method: N/A	Instrument: ORION-4STAR
Client ID: HTA12-0212-1	Prep Method: 9040C	Prep Date: N/A
Matrix: Water	Analytical Method: 9040C	Cal Date:
Workgroup #: WG389699	Analyst: JDH	Run Date: 02/15/2012 14:50
Collect Date: 02/14/2012 16:10	Dilution: 1	File ID: OS12021615413501
Sample Tag:	Units: UNITS	

Analyte	CAS #	Result	Qual	LOQ	LOD
Corrosivity pH	10-29-7	6.99		0.000	0.000

Sample #: L12020435-09	PrePrep Method: N/A	Instrument: SMARTCHEM
Client ID: HTA12-0212-1	Prep Method: 310.2	Prep Date: N/A
Matrix: Water	Analytical Method: 310.2	Cal Date: 02/16/2012 11:59
Workgroup #: WG389764	Analyst: DIH	Run Date: 02/16/2012 12:03
Collect Date: 02/14/2012 16:10	Dilution: 1	File ID: SC120216005.015
Sample Tag: 01	Units: mg/L	

Analyte	CAS #	Result	Qual	LOQ	LOD
Alkalinity, Total (as CaCO3)		257		20.0	10.0

Sample #: L12020435-09	PrePrep Method: N/A	Instrument: SMARTCHEM
Client ID: HTA12-0212-1	Prep Method: 310.2	Prep Date: N/A
Matrix: Water	Analytical Method: 310.2	Cal Date: 02/16/2012 11:59
Workgroup #: WG389764	Analyst: DIH	Run Date: 02/16/2012 12:03
Collect Date: 02/14/2012 16:10	Dilution: 1	File ID: SC120216005.015
Sample Tag: 01	Units: mg/L	

Analyte	CAS #	Result	Qual	LOQ	LOD
Alkalinity, Carbonate (as CaCO3)			U	20.0	10.0

U Analyte was not detected. The concentration is below the reported LOD.

Sample #: L12020435-09	PrePrep Method: N/A	Instrument: SMARTCHEM
Client ID: HTA12-0212-1	Prep Method: 310.2	Prep Date: N/A
Matrix: Water	Analytical Method: 310.2	Cal Date: 02/16/2012 11:59
Workgroup #: WG389764	Analyst: DIH	Run Date: 02/16/2012 12:03
Collect Date: 02/14/2012 16:10	Dilution: 1	File ID: SC120216005.015
Sample Tag: 01	Units: mg/L	

Analyte	CAS #	Result	Qual	LOQ	LOD
Alkalinity, Bicarbonate (as CaCO3)		257		20.0	10.0

Certificate of Analysis

Sample #: L12020435-09	PrePrep Method: N/A	Instrument: SMARTCHEM
Client ID: HTA12-0212-1	Prep Method: 353.2	Prep Date: N/A
Matrix: Water	Analytical Method: 353.2	Cal Date: 02/21/2012 10:43
Workgroup #: WG390221	Analyst: DIH	Run Date: 02/21/2012 13:25
Collect Date: 02/14/2012 16:10	Dilution: 4	File ID: SC12022209181201
Sample Tag:	Units: mg/L	

Analyte	CAS #	Result	Qual	LOQ	LOD
Nitrate-Nitrite (as N)		2.84		0.200	0.100

Sample #: L12020435-10	PrePrep Method: N/A	Instrument: ICP-THERMO2
Client ID: HTA12-0212-1	Prep Method: 3005A	Prep Date: 02/17/2012 07:33
Matrix: Water	Analytical Method: 6010B	Cal Date: 02/26/2012 08:25
Workgroup #: WG389943	Analyst: KHR	Run Date: 02/26/2012 12:49
Collect Date: 02/14/2012 16:10	Dilution: 1	File ID: T2.022612.124915
Sample Tag: 02	Units: mg/L	

Analyte	CAS #	Result	Qual	LOQ	LOD
Iron, Dissolved	7439-89-6		U	0.100	0.0500
U	Analyte was not detected. The concentration is below the reported LOD.				

Sample #: L12020435-10	PrePrep Method: N/A	Instrument: ICP-THERMO2
Client ID: HTA12-0212-1	Prep Method: 3005A	Prep Date: 02/17/2012 07:33
Matrix: Water	Analytical Method: 6010B	Cal Date: 02/22/2012 09:14
Workgroup #: WG389943	Analyst: KHR	Run Date: 02/22/2012 11:06
Collect Date: 02/14/2012 16:10	Dilution: 1	File ID: T2.022212.110609
Sample Tag: 01	Units: mg/L	

Analyte	CAS #	Result	Qual	LOQ	LOD
Aluminum, Dissolved	7429-90-5		U	0.100	0.0500
Beryllium, Dissolved	7440-41-7		U	0.00200	0.00100
Calcium, Dissolved	7440-70-2	115		0.200	0.100
Magnesium, Dissolved	7439-95-4	29.9		0.500	0.250
Manganese, Dissolved	7439-96-5		U	0.0100	0.00500
Potassium, Dissolved	7440-09-7	1.46		1.00	0.500
Sodium, Dissolved	7440-23-5	67.1		0.500	0.250
Tin, Dissolved	7440-31-5		U	0.500	0.250
Vanadium, Dissolved	7440-62-2		U	0.0100	0.00500
Zinc, Dissolved	7440-66-6	0.0112	J	0.0200	0.0100
J	Estimated value ; the analyte concentration was less than the LOQ.				
U	Analyte was not detected. The concentration is below the reported LOD.				

Certificate of Analysis

Sample #: L12020435-10	PrePrep Method: N/A	Instrument: ELAN-ICP
Client ID: HTA12-0212-1	Prep Method: 3015	Prep Date: 02/17/2012 06:25
Matrix: Water	Analytical Method: 6020	Cal Date: 02/20/2012 10:19
Workgroup #: WG389946	Analyst: EDL	Run Date: 02/20/2012 12:34
Collect Date: 02/14/2012 16:10	Dilution: 1	File ID: EL.022012.123415
Sample Tag: 02	Units: mg/L	

Analyte	CAS #	Result	Qual	LOQ	LOD
Antimony, Dissolved	7440-36-0		U	0.00100	0.000500
Arsenic, Dissolved	7440-38-2		U	0.00100	0.000500
Barium, Dissolved	7440-39-3	0.0252		0.00300	0.00150
Cadmium, Dissolved	7440-43-9		U	0.000600	0.000300
Chromium, Dissolved	7440-47-3	0.00107	J	0.00200	0.00100
Cobalt, Dissolved	7440-48-4		U	0.00100	0.000500
Copper, Dissolved	7440-50-8	0.00238		0.00200	0.00100
Lead, Dissolved	7439-92-1		U	0.00100	0.000500
Nickel, Dissolved	7440-02-0	0.00352	J	0.00400	0.00200
Selenium, Dissolved	7782-49-2	0.00335		0.00100	0.000500
Silver, Dissolved	7440-22-4		U	0.00100	0.000500
Thallium, Dissolved	7440-28-0		U	0.000200	0.000100
J	Estimated value ; the analyte concentration was less than the LOQ.				
U	Analyte was not detected. The concentration is below the reported LOD.				

Sample #: L12020435-10	PrePrep Method: N/A	Instrument: HYDRA
Client ID: HTA12-0212-1	Prep Method: 7470A	Prep Date: 02/17/2012 08:39
Matrix: Water	Analytical Method: 7470A	Cal Date: 02/20/2012 09:55
Workgroup #: WG390074	Analyst: PDM	Run Date: 02/20/2012 11:20
Collect Date: 02/14/2012 16:10	Dilution: 1	File ID: HY.022012.112036
Sample Tag: 01	Units: mg/L	

Analyte	CAS #	Result	Qual	LOQ	LOD
Mercury, Dissolved	7439-97-6		U	0.000200	0.000100
U	Analyte was not detected. The concentration is below the reported LOD.				

Microbac Laboratories Inc.
Ohio Valley Division Analyst List
March 5, 2012

ADC - ANTHONY D. CANTER	AJF - AMANDA J. FICKIESEN	ALB - ANNIE L. BROWN
ALV - AMY L. VALENTINE	AML - TONY M. LONG	AZH - AFTER HOURS
BLG - BRENDA L. GREENWALT	BRG - BRENDA R. GREGORY	CAA - CASSIE A. AUGENSTEIN
CAF - CHERYL A. FLOWERS	CEB - CHAD E. BARNES	CLC - CHRYS L. CRAWFORD
CLS - CARA L. STRICKLER	CLW - CHARISSA L. WINTERS	CPD - CHAD P. DAVIS
CS - CODY M. STRAHLER	CSH - CHRIS S. HILL	DDE - DEBRA D. ELLIOTT
DEV - DAVID E. VANDENBERG	DGB - DOUGLAS G. BUTCHER	DHG - DEBORAH H. GRIFFITHS
DIH - DEANNA I. HESSON	DLB - DAVID L. BUMGARNER	DLP - DOROTHY L. PAYNE
DLR - DIANNA L. RAUCH	DSM - DAVID S. MOSSOR	ECL - ERIC C. LAWSON
EDL - ERIN D. LONG	ERP - ERIN R. PORTER	FJB - FRANCES J. BOLDEN
HAV - HEMA VILASAGAR	HJR - HOLLY J. REED	JAL - JOHN A. LENT
JBK - JEREMY B. KINNEY	JDH - JUSTIN D. HESSON	JKS - JANE K. SCHAAD
JLL - JOHN L. LENT	JWR - JOHN W. RICHARDS	JWS - JACK W. SHEAVES
JYH - JI Y. HU	KEB - KATIE E. BARNES	KHR - KIM H. RHODES
KRA - KATHY R. ALBERTSON	LKN - LINDA K. NEDEFF	LSB - LESLIE S. BUCINA
MDA - MIKE D. ALBERTSON	MDC - MIKE D. COCHRAN	MES - MARY E. SCHILLING
MMB - MAREN M. BEERY	MRT - MICHELLE R. TAYLOR	MSW - MATT S. WILSON
PDM - PIERCE D. MORRIS	PWD - PAUL W. DENT	RAH - ROY A. HALSTEAD
REK - BOB E. KYER	RLB - BOB BUCHANAN	RLK - ROBIN L. KLINGER
RWC - RODNEY W. CAMPBELL	SJP - SUZANNE J. PAUGH	SLM - STEPHANIE L. MOSSBURG
SLP - SHERI L. PFALZGRAF	TIP - TAE I. PARRISH	TMB - TIFFANY M. BAILEY
TMM - TAMMY M. MORRIS	VC - VICKI COLLIER	WJB - WILL J. BEASLEY
WTD - WADE T. DELONG		

Qualifier	Description
*	Surrogate or spike compound out of range
+	Correlation coefficient for the MSA is less than 0.995
<	Result is less than the associated numerical value.
>	Result is greater than the associated numerical value.
A	See the report narrative
B	The reported result is associated with a contaminated method blank.
B1	Target analyte detected in method blank at or above the method reporting limit
B3	Target analyte detected in calibration blank at or above the method reporting limit
B4	The BOD unseeded dilution water blank exceeded 0.2 mg/L
C	Confirmed by GC/MS
CG	Confluent growth
DL	Surrogate or spike compound was diluted out
E	Estimated concentration due to sample matrix interference
EDL	Elevated sample reporting limits, presence of non-target analytes
EMPC	Estimated Maximum Possible Concentration
F, S	Estimated result below quantitation limit; method of standard additions(MSA)
FL	Free Liquid
H1	Sample analysis performed past holding time.
I	Semiquantitative result (out of instrument calibration range)
J	Estimated concentration; sample matrix interference.
J	Estimated value ; the analyte concentration was greater than the highest standard
J	Estimated value ; the analyte concentration was less than the LOQ.
J	The reported result is an estimated value.
J,B	Analyte detected in both the method blank and sample above the MDL.
J,P	Estimate; columns don't agree to within 40%
J,S	Estimated concentration; analyzed by method of standard addition (MSA)
L	Sample reporting limits elevated due to matrix interference
L1	The associated blank spike (LCS) recovery was above the laboratory acceptance limits.
L2	The associated blank spike (LCS) recovery was below the laboratory acceptance limits.
M	Matrix effect; the concentration is an estimate due to matrix effect.
N	Nontarget analyte; the analyte is a tentatively identified compound (TIC) by GC/MS
NA	Not applicable
ND	Not detected at or above the reporting limit (RL).
ND, L	Not detected; sample reporting limit (RL) elevated due to interference
ND, S	Not detected; analyzed by method of standard addition (MSA)
NF	Not found by library search
NFL	No free liquid
NI	Non-ignitable
NR	Analyte is not required to be analyzed
NS	Not spiked
P	Concentrations >40% difference between the two GC columns
Q	One or more quality control criteria failed. See narrative.
QNS	Quantity of sample not sufficient to perform analysis
RA	Reanalysis confirms reported results
RE	Reanalysis confirms sample matrix interference
S	Analyzed by method of standard addition (MSA)
SMI	Sample matrix interference on surrogate
SP	Reported results are for spike compounds only
TIC	Library Search Compound
TNTC	Too numerous to count
U	Analyte was not detected. The concentration is below the reported LOD.
UJ	Undetected; the analyte was analyzed for, but not detected.
UQ	Undetected; the analyte was analyzed for, but not detected.
W	Post-digestion spike for furnace AA out of control limits
X	Exceeds regulatory limit
X, S	Exceeds regulatory limit; method of standard additions (MSA)
Z	Cannot be resolved from isomer - see below

***Special Notes for Organic Analytes



1. Acrolein and acrylonitrile by method 624 are semi-quantitative screens only.
2. 1,2-Diphenylhydrazine is unstable and is reported as azobenzene.
3. N-nitrosodiphenylamine cannot be separated from diphenylamine.
4. 3-Methylphenol and 4-Methylphenol are unresolvable compounds.
5. m-Xylene and p-Xylene are unresolvable compounds.
6. The reporting limits for Appendix II/IX compounds by method 8270 are based on EPA estimated PQLs referenced in 40 CFR Part 264, Appendix IX. They are not always achievable for every compound and are matrix dependent.



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Microbac

CHAIN-OF-CUSTODY RECORD

[illegible]

*Water (W), Soil (S), Solid Waste (SD), Unknown (X)

Page 1 of 1

Internal Chain of Custody Report

Login: L12020435

Account: 3005

Project: 3005.011

Samples: 10

Due Date: 24-FEB-2012

<u>Samplenum</u>	<u>Container ID</u>	<u>Products</u>
L12020435-01	938035	300 8330

Bottle: 1

Seq.	Purpose	From	To	Date/Time	Accept	Relinquish	pH
1	LOGIN	COOLER	W1	15-FEB-2012 13:19	RLK		
2	PREP	W1	EXT	21-FEB-2012 09:15	CEB	RLK	
3	DISP	EXT	DISP	21-FEB-2012 15:17	JKS	JKS	
4	ANALYZ*	EXT	SEMI	23-FEB-2012 09:36	ECL	CEB	

**Sample extract/digestate/leachate*

Bottle: 2

Seq.	Purpose	From	To	Date/Time	Accept	Relinquish	pH
1	LOGIN	COOLER	W1	15-FEB-2012 13:19	RLK		
2	STORE	W1	A1	28-FEB-2012 12:27	BLG	BLG	

**Sample extract/digestate/leachate*

<u>Samplenum</u>	<u>Container ID</u>	<u>Products</u>
L12020435-01	938036	

Bottle: 1

Seq.	Purpose	From	To	Date/Time	Accept	Relinquish	pH
1	LOGIN	COOLER	W1	15-FEB-2012 13:19	RLK		
2	ANALYZ	W1	SEM	17-FEB-2012 09:09	JBK	RLK	
3	STORE	SEM	A1	29-FEB-2012 11:12	RLK	JBK	

<u>Samplenum</u>	<u>Container ID</u>	<u>Products</u>
L12020435-01	938037	ALK ALK-B ALK-C

Bottle: 1

Seq.	Purpose	From	To	Date/Time	Accept	Relinquish	pH
1	LOGIN	COOLER	W1	15-FEB-2012 13:19	RLK		
2	ANALYZ	W1	WET	16-FEB-2012 07:59	DIH	RLK	
3	STORE	WET	A1	17-FEB-2012 07:09	AZH	DIH	

<u>Samplenum</u>	<u>Container ID</u>	<u>Products</u>
L12020435-01	938038	COR-PH

Bottle: 1

Seq.	Purpose	From	To	Date/Time	Accept	Relinquish	pH
1	LOGIN	COOLER	W1	15-FEB-2012 13:19	RLK		
2	ANALYZ	W1	WET	15-FEB-2012 13:36	RLK	RLK	
3	STORE	WET	A1	17-FEB-2012 08:53	RLK	HJR	

A1 - Sample Archive (COLD)
 A2 - Sample Archive (AMBIENT)
 F1 - Volatiles Freezer in Login
 V1 - Volatiles Refrigerator in Login
 W1 - Walkin Cooler in Login



Internal Chain of Custody Report

Login: L12020435

Account: 3005

Project: 3005.011

Samples: 10

Due Date: 24-FEB-2012

Samplenum **Container ID** **Products**
L12020435-01 938039 6850

Bottle: 1

Seq.	Purpose	From	To	Date/Time	Accept	Relinquish	pH
1	LOGIN	COOLER	W1	15-FEB-2012 13:19	RLK		
2	ANALYZ	W1	SEM	23-FEB-2012 08:57	JWR	JKS	
3	STORE	SEM	A1	28-FEB-2012 10:06	RLK	JWR	

Samplenum **Container ID** **Products**
L12020435-01 938040 NO3NO2

Bottle: 1

Seq.	Purpose	From	To	Date/Time	Accept	Relinquish	pH
1	LOGIN	COOLER	W1	15-FEB-2012 13:19	RLK		
2	ANALYZ	W1	WET	21-FEB-2012 12:06	DIH	JKS	
3	STORE	WET	A1	22-FEB-2012 08:16	JKS	DIH	

Samplenum **Container ID** **Products**
L12020435-01 938041 FE MN

Bottle: 1

Seq.	Purpose	From	To	Date/Time	Accept	Relinquish	pH
1	LOGIN	COOLER	W1	15-FEB-2012 13:19	RLK		<2
2	PREP	W1	DIG	15-FEB-2012 13:39	REK	RLK	
3	ANALYZ*	DIG	METALS	17-FEB-2012 10:29	KHR	REK	
4	STORE	DIG	A1	17-FEB-2012 14:21	RLK	ERP	

**Sample extract/digestate/leachate*

Samplenum **Container ID** **Products**
L12020435-02 938042 AG-MSD AL-D AS-MSD BA-MS-D BE-AX-D CA-D CD-MS-

Bottle: 1

Seq.	Purpose	From	To	Date/Time	Accept	Relinquish	pH
1	LOGIN	COOLER	W1	15-FEB-2012 13:19	RLK		
2	PREP	W1	DIG	15-FEB-2012 13:39	REK	RLK	
3	STORE	DIG	W1	15-FEB-2012 15:51	RLK	ERP	
4	STORE	DIG	A1	16-FEB-2012 05:06	AZH	REK	
5	ANALYZ*	DIG	METALS	17-FEB-2012 10:29	KHR	REK	

**Sample extract/digestate/leachate*

A1 - Sample Archive (COLD)
A2 - Sample Archive (AMBIENT)
F1 - Volatiles Freezer in Login
V1 - Volatiles Refrigerator in Login
W1 - Walkin Cooler in Login



Internal Chain of Custody Report

Login: L12020435

Account: 3005

Project: 3005.011

Samples: 10

Due Date: 24-FEB-2012

Samplenum Container ID Products
L12020435-03 938043 300 8330

Bottle: 1

Seq.	Purpose	From	To	Date/Time	Accept	Relinquish	pH
1	LOGIN	COOLER	W1	15-FEB-2012 13:19	RLK		
2	PREP	W1	EXT	21-FEB-2012 09:15	CEB	RLK	
3	DISP	EXT	DISP	21-FEB-2012 15:18	JKS	JKS	
4	ANALYZ*	EXT	SEMI	23-FEB-2012 09:36	ECL	CEB	

**Sample extract/digestate/leachate*

Bottle: 2

Seq.	Purpose	From	To	Date/Time	Accept	Relinquish	pH
1	LOGIN	COOLER	W1	15-FEB-2012 13:19	RLK		
2	STORE	W1	A1	28-FEB-2012 12:27	BLG	BLG	

**Sample extract/digestate/leachate*

Samplenum Container ID Products
L12020435-03 938044

Bottle: 1

Seq.	Purpose	From	To	Date/Time	Accept	Relinquish	pH
1	LOGIN	COOLER	W1	15-FEB-2012 13:19	RLK		
2	ANALYZ	W1	SEM	17-FEB-2012 09:09	JBK	RLK	
3	STORE	SEM	A1	29-FEB-2012 11:12	RLK	JBK	

Samplenum Container ID Products
L12020435-03 938045 ALK ALK-B ALK-C

Bottle: 1

Seq.	Purpose	From	To	Date/Time	Accept	Relinquish	pH
1	LOGIN	COOLER	W1	15-FEB-2012 13:19	RLK		
2	ANALYZ	W1	WET	16-FEB-2012 07:59	DIH	RLK	
3	STORE	WET	A1	17-FEB-2012 07:09	AZH	DIH	

Samplenum Container ID Products
L12020435-03 938046 COR-PH

Bottle: 1

Seq.	Purpose	From	To	Date/Time	Accept	Relinquish	pH
1	LOGIN	COOLER	W1	15-FEB-2012 13:19	RLK		
2	ANALYZ	W1	WET	15-FEB-2012 13:36	RLK	RLK	
3	STORE	WET	A1	17-FEB-2012 08:53	RLK	HJR	

A1 - Sample Archive (COLD)
A2 - Sample Archive (AMBIENT)
F1 - Volatiles Freezer in Login
V1 - Volatiles Refrigerator in Login
W1 - Walkin Cooler in Login



Internal Chain of Custody Report

Login: L12020435

Account: 3005

Project: 3005.011

Samples: 10

Due Date: 24-FEB-2012

Samplenum Container ID Products
L12020435-03 938047 6850

Bottle: 1

Seq.	Purpose	From	To	Date/Time	Accept	Relinquish	pH
1	LOGIN	COOLER	W1	15-FEB-2012 13:19	RLK		
2	ANALYZ	W1	SEM	23-FEB-2012 08:57	JWR	JKS	
3	STORE	SEM	A1	28-FEB-2012 10:06	RLK	JWR	

Samplenum Container ID Products
L12020435-03 938048 NO3NO2

Bottle: 1

Seq.	Purpose	From	To	Date/Time	Accept	Relinquish	pH
1	LOGIN	COOLER	W1	15-FEB-2012 13:19	RLK		
2	ANALYZ	W1	WET	21-FEB-2012 12:06	DIH	JKS	
3	STORE	WET	A1	22-FEB-2012 08:16	JKS	DIH	

Samplenum Container ID Products
L12020435-03 938049 FE MN

Bottle: 1

Seq.	Purpose	From	To	Date/Time	Accept	Relinquish	pH
1	LOGIN	COOLER	W1	15-FEB-2012 13:19	RLK		<2
2	PREP	W1	DIG	15-FEB-2012 13:39	REK	RLK	
3	ANALYZ*	DIG	METALS	17-FEB-2012 10:29	KHR	REK	
4	STORE	DIG	A1	17-FEB-2012 14:21	RLK	ERP	

**Sample extract/digestate/leachate*

Samplenum Container ID Products
L12020435-04 938050 AG-MSD AL-D AS-MSD BA-MS-D BE-AX-D CA-D CD-MS-

Bottle: 1

Seq.	Purpose	From	To	Date/Time	Accept	Relinquish	pH
1	LOGIN	COOLER	W1	15-FEB-2012 13:19	RLK		
2	PREP	W1	DIG	15-FEB-2012 13:40	REK	RLK	
3	STORE	DIG	W1	15-FEB-2012 15:51	RLK	ERP	
4	STORE	DIG	A1	16-FEB-2012 05:06	AZH	REK	
5	ANALYZ*	DIG	METALS	17-FEB-2012 10:29	KHR	REK	

**Sample extract/digestate/leachate*

A1 - Sample Archive (COLD)
A2 - Sample Archive (AMBIENT)
F1 - Volatiles Freezer in Login
V1 - Volatiles Refrigerator in Login
W1 - Walkin Cooler in Login



Internal Chain of Custody Report

Login: L12020435

Account: 3005

Project: 3005.011

Samples: 10

Due Date: 24-FEB-2012

Samplenum **Container ID** **Products**
L12020435-05 938051 300 8330

Bottle: 1

Seq.	Purpose	From	To	Date/Time	Accept	Relinquish	pH
1	LOGIN	COOLER	W1	15-FEB-2012 13:19	RLK		
2	PREP	W1	EXT	21-FEB-2012 09:15	CEB	RLK	
3	DISP	EXT	DISP	21-FEB-2012 15:19	JKS	JKS	
4	ANALYZ*	EXT	SEMI	23-FEB-2012 09:36	ECL	CEB	

**Sample extract/digestate/leachate*

Bottle: 2

Seq.	Purpose	From	To	Date/Time	Accept	Relinquish	pH
1	LOGIN	COOLER	W1	15-FEB-2012 13:19	RLK		
2	STORE	W1	A1	28-FEB-2012 12:27	BLG	BLG	

**Sample extract/digestate/leachate*

Samplenum **Container ID** **Products**
L12020435-05 938052

Bottle: 1

Seq.	Purpose	From	To	Date/Time	Accept	Relinquish	pH
1	LOGIN	COOLER	W1	15-FEB-2012 13:19	RLK		
2	ANALYZ	W1	SEM	17-FEB-2012 09:09	JBK	RLK	
3	STORE	SEM	A1	29-FEB-2012 11:12	RLK	JBK	

Samplenum **Container ID** **Products**
L12020435-05 938053 ALK ALK-B ALK-C

Bottle: 1

Seq.	Purpose	From	To	Date/Time	Accept	Relinquish	pH
1	LOGIN	COOLER	W1	15-FEB-2012 13:19	RLK		
2	ANALYZ	W1	WET	16-FEB-2012 07:59	DIH	RLK	
3	STORE	WET	A1	17-FEB-2012 07:09	AZH	DIH	

Samplenum **Container ID** **Products**
L12020435-05 938054 COR-PH

Bottle: 1

Seq.	Purpose	From	To	Date/Time	Accept	Relinquish	pH
1	LOGIN	COOLER	W1	15-FEB-2012 13:19	RLK		
2	ANALYZ	W1	WET	15-FEB-2012 13:36	RLK	RLK	
3	STORE	WET	A1	17-FEB-2012 08:54	RLK	HJR	

A1 - Sample Archive (COLD)
A2 - Sample Archive (AMBIENT)
F1 - Volatiles Freezer in Login
V1 - Volatiles Refrigerator in Login
W1 - Walkin Cooler in Login



Internal Chain of Custody Report

Login: L12020435

Account: 3005

Project: 3005.011

Samples: 10

Due Date: 24-FEB-2012

Samplenum **Container ID** **Products**
L12020435-05 938055 6850

Bottle: 1

Seq.	Purpose	From	To	Date/Time	Accept	Relinquish	pH
1	LOGIN	COOLER	W1	15-FEB-2012 13:19	RLK		
2	ANALYZ	W1	SEM	23-FEB-2012 08:57	JWR	JKS	
3	STORE	SEM	A1	28-FEB-2012 10:06	RLK	JWR	

Samplenum **Container ID** **Products**
L12020435-05 938056 NO3NO2

Bottle: 1

Seq.	Purpose	From	To	Date/Time	Accept	Relinquish	pH
1	LOGIN	COOLER	W1	15-FEB-2012 13:19	RLK		
2	ANALYZ	W1	WET	21-FEB-2012 12:06	DIH	JKS	
3	STORE	WET	A1	22-FEB-2012 08:16	JKS	DIH	

Samplenum **Container ID** **Products**
L12020435-05 938057 FE MN

Bottle: 1

Seq.	Purpose	From	To	Date/Time	Accept	Relinquish	pH
1	LOGIN	COOLER	W1	15-FEB-2012 13:19	RLK		<2
2	PREP	W1	DIG	15-FEB-2012 13:40	REK	RLK	
3	ANALYZ*	DIG	METALS	17-FEB-2012 10:29	KHR	REK	
4	STORE	DIG	A1	17-FEB-2012 14:21	RLK	ERP	

**Sample extract/digestate/leachate*

Samplenum **Container ID** **Products**
L12020435-06 938058 AG-MSD AL-D AS-MSD BA-MS-D BE-AX-D CA-D CD-MS-

Bottle: 1

Seq.	Purpose	From	To	Date/Time	Accept	Relinquish	pH
1	LOGIN	COOLER	W1	15-FEB-2012 13:19	RLK		
2	PREP	W1	DIG	15-FEB-2012 13:40	REK	RLK	
3	STORE	DIG	W1	15-FEB-2012 15:51	RLK	ERP	
4	STORE	DIG	A1	16-FEB-2012 05:06	AZH	REK	
5	ANALYZ*	DIG	METALS	17-FEB-2012 10:29	KHR	REK	

**Sample extract/digestate/leachate*

A1 - Sample Archive (COLD)
A2 - Sample Archive (AMBIENT)
F1 - Volatiles Freezer in Login
V1 - Volatiles Refrigerator in Login
W1 - Walkin Cooler in Login



Internal Chain of Custody Report

Login: L12020435

Account: 3005

Project: 3005.011

Samples: 10

Due Date: 24-FEB-2012

Samplenum **Container ID** **Products**
L12020435-07 938059 300 8330

Bottle: 1

Seq.	Purpose	From	To	Date/Time	Accept	Relinquish	pH
1	LOGIN	COOLER	W1	15-FEB-2012 13:19	RLK		
2	PREP	W1	EXT	21-FEB-2012 09:15	CEB	RLK	
3	DISP	EXT	DISP	21-FEB-2012 15:18	JKS	JKS	
4	ANALYZ*	EXT	SEMI	23-FEB-2012 09:36	ECL	CEB	

**Sample extract/digestate/leachate*

Bottle: 2

Seq.	Purpose	From	To	Date/Time	Accept	Relinquish	pH
1	LOGIN	COOLER	W1	15-FEB-2012 13:19	RLK		
2	STORE	W1	A1	28-FEB-2012 12:27	BLG	BLG	

**Sample extract/digestate/leachate*

Samplenum **Container ID** **Products**
L12020435-07 938060

Bottle: 1

Seq.	Purpose	From	To	Date/Time	Accept	Relinquish	pH
1	LOGIN	COOLER	W1	15-FEB-2012 13:19	RLK		
2	ANALYZ	W1	SEM	17-FEB-2012 09:09	JBK	RLK	
3	STORE	SEM	A1	29-FEB-2012 11:12	RLK	JBK	

Samplenum **Container ID** **Products**
L12020435-07 938061 ALK ALK-B ALK-C

Bottle: 1

Seq.	Purpose	From	To	Date/Time	Accept	Relinquish	pH
1	LOGIN	COOLER	W1	15-FEB-2012 13:19	RLK		
2	ANALYZ	W1	WET	16-FEB-2012 07:59	DIH	RLK	
3	STORE	WET	A1	17-FEB-2012 07:09	AZH	DIH	

Samplenum **Container ID** **Products**
L12020435-07 938062 COR-PH

Bottle: 1

Seq.	Purpose	From	To	Date/Time	Accept	Relinquish	pH
1	LOGIN	COOLER	W1	15-FEB-2012 13:19	RLK		
2	ANALYZ	W1	WET	15-FEB-2012 13:36	RLK	RLK	
3	STORE	WET	A1	17-FEB-2012 08:53	RLK	HJR	

A1 - Sample Archive (COLD)
A2 - Sample Archive (AMBIENT)
F1 - Volatiles Freezer in Login
V1 - Volatiles Refrigerator in Login
W1 - Walkin Cooler in Login



Internal Chain of Custody Report

Login: L12020435

Account: 3005

Project: 3005.011

Samples: 10

Due Date: 24-FEB-2012

Samplenum Container ID Products
L12020435-07 938063 6850

Bottle: 1

Seq.	Purpose	From	To	Date/Time	Accept	Relinquish	pH
1	LOGIN	COOLER	W1	15-FEB-2012 13:19	RLK		
2	ANALYZ	W1	SEM	23-FEB-2012 08:57	JWR	JKS	
3	STORE	SEM	A1	28-FEB-2012 10:06	RLK	JWR	

Samplenum Container ID Products
L12020435-07 938064 NO3NO2

Bottle: 1

Seq.	Purpose	From	To	Date/Time	Accept	Relinquish	pH
1	LOGIN	COOLER	W1	15-FEB-2012 13:19	RLK		
2	ANALYZ	W1	WET	21-FEB-2012 12:06	DIH	JKS	
3	STORE	WET	A1	22-FEB-2012 08:16	JKS	DIH	

Samplenum Container ID Products
L12020435-07 938065 FE MN

Bottle: 1

Seq.	Purpose	From	To	Date/Time	Accept	Relinquish	pH
1	LOGIN	COOLER	W1	15-FEB-2012 13:19	RLK		<2
2	PREP	W1	DIG	15-FEB-2012 13:40	REK	RLK	
3	ANALYZ*	DIG	METALS	17-FEB-2012 10:29	KHR	REK	
4	STORE	DIG	A1	17-FEB-2012 14:21	RLK	ERP	

**Sample extract/digestate/leachate*

Samplenum Container ID Products
L12020435-08 938066 ZN-D AG-MSD AL-D AS-MSD BA-MS-D BE-AX-D CA-D (

Bottle: 1

Seq.	Purpose	From	To	Date/Time	Accept	Relinquish	pH
1	LOGIN	COOLER	W1	15-FEB-2012 13:19	RLK		
2	PREP	W1	DIG	15-FEB-2012 13:40	REK	RLK	
3	STORE	DIG	W1	15-FEB-2012 15:51	RLK	ERP	
4	STORE	DIG	A1	16-FEB-2012 05:06	AZH	REK	
5	ANALYZ*	DIG	METALS	17-FEB-2012 10:29	KHR	REK	

**Sample extract/digestate/leachate*

A1 - Sample Archive (COLD)
A2 - Sample Archive (AMBIENT)
F1 - Volatiles Freezer in Login
V1 - Volatiles Refrigerator in Login
W1 - Walkin Cooler in Login



Internal Chain of Custody Report

Login: L12020435

Account: 3005

Project: 3005.011

Samples: 10

Due Date: 24-FEB-2012

Samplenum Container ID Products
L12020435-09 938067 300 8330

Bottle: 1

Seq.	Purpose	From	To	Date/Time	Accept	Relinquish	pH
1	LOGIN	COOLER	W1	15-FEB-2012 13:19	RLK		
2	PREP	W1	EXT	21-FEB-2012 09:15	CEB	RLK	
3	DISP	EXT	DISP	21-FEB-2012 15:18	JKS	JKS	
4	ANALYZ*	EXT	SEMI	23-FEB-2012 09:36	ECL	CEB	

**Sample extract/digestate/leachate*

Bottle: 2

Seq.	Purpose	From	To	Date/Time	Accept	Relinquish	pH
1	LOGIN	COOLER	W1	15-FEB-2012 13:19	RLK		
2	STORE	W1	A1	28-FEB-2012 12:27	BLG	BLG	

**Sample extract/digestate/leachate*

Samplenum Container ID Products
L12020435-09 938068

Bottle: 1

Seq.	Purpose	From	To	Date/Time	Accept	Relinquish	pH
1	LOGIN	COOLER	W1	15-FEB-2012 13:19	RLK		
2	ANALYZ	W1	SEM	17-FEB-2012 09:09	JBK	RLK	
3	STORE	SEM	A1	29-FEB-2012 11:12	RLK	JBK	

Samplenum Container ID Products
L12020435-09 938069 ALK ALK-B ALK-C

Bottle: 1

Seq.	Purpose	From	To	Date/Time	Accept	Relinquish	pH
1	LOGIN	COOLER	W1	15-FEB-2012 13:19	RLK		
2	ANALYZ	W1	WET	16-FEB-2012 07:59	DIH	RLK	
3	STORE	WET	A1	17-FEB-2012 07:09	AZH	DIH	

Samplenum Container ID Products
L12020435-09 938070 COR-PH

Bottle: 1

Seq.	Purpose	From	To	Date/Time	Accept	Relinquish	pH
1	LOGIN	COOLER	W1	15-FEB-2012 13:19	RLK		
2	ANALYZ	W1	WET	15-FEB-2012 13:36	RLK	RLK	
3	STORE	WET	A1	17-FEB-2012 08:53	RLK	HJR	

A1 - Sample Archive (COLD)
A2 - Sample Archive (AMBIENT)
F1 - Volatiles Freezer in Login
V1 - Volatiles Refrigerator in Login
W1 - Walkin Cooler in Login



Internal Chain of Custody Report

Login: L12020435

Account: 3005

Project: 3005.011

Samples: 10

Due Date: 24-FEB-2012

Samplenum Container ID Products
L12020435-09 938071 6850

Bottle: 1

Seq.	Purpose	From	To	Date/Time	Accept	Relinquish	pH
1	LOGIN	COOLER	W1	15-FEB-2012 13:19	RLK		
2	ANALYZ	W1	SEM	23-FEB-2012 08:57	JWR	JKS	
3	STORE	SEM	A1	28-FEB-2012 10:06	RLK	JWR	

Samplenum Container ID Products
L12020435-09 938072 NO3NO2

Bottle: 1

Seq.	Purpose	From	To	Date/Time	Accept	Relinquish	pH
1	LOGIN	COOLER	W1	15-FEB-2012 13:19	RLK		
2	ANALYZ	W1	WET	21-FEB-2012 12:06	DIH	JKS	
3	STORE	WET	A1	22-FEB-2012 08:16	JKS	DIH	

Samplenum Container ID Products
L12020435-09 938073 FE MN

Bottle: 1

Seq.	Purpose	From	To	Date/Time	Accept	Relinquish	pH
1	LOGIN	COOLER	W1	15-FEB-2012 13:19	RLK		<2
2	PREP	W1	DIG	15-FEB-2012 13:40	REK	RLK	
3	ANALYZ*	DIG	METALS	17-FEB-2012 10:29	KHR	REK	
4	STORE	DIG	A1	17-FEB-2012 14:21	RLK	ERP	

**Sample extract/digestate/leachate*

Samplenum Container ID Products
L12020435-10 938074 AG-MSD AL-D AS-MSD BA-MS-D BE-AX-D CA-D CD-MS-

Bottle: 1

Seq.	Purpose	From	To	Date/Time	Accept	Relinquish	pH
1	LOGIN	COOLER	W1	15-FEB-2012 13:19	RLK		
2	PREP	W1	DIG	15-FEB-2012 13:40	REK	RLK	
3	STORE	DIG	W1	15-FEB-2012 15:51	RLK	ERP	
4	STORE	DIG	A1	16-FEB-2012 05:06	AZH	REK	
5	ANALYZ*	DIG	METALS	17-FEB-2012 10:29	KHR	REK	

**Sample extract/digestate/leachate*

A1 - Sample Archive (COLD)
A2 - Sample Archive (AMBIENT)
F1 - Volatiles Freezer in Login
V1 - Volatiles Refrigerator in Login
W1 - Walkin Cooler in Login

